808 Preparing for Disasters: Developing Business Continuity Plans

Douglas L. Curry
General Counsel
Lincoln Electric System

Wayne A. Harris
Chief Counsel
ACES Power Marketing LLC

Wayne J. Lovett
Executive Vice President & General Counsel
Mercury Air Group, Inc.

Patti Phelan
Legal Counsel
NDI (Northern Digital)

Faculty Biographies

Douglas L. Curry

Douglas L. Curry is general counsel for the Lincoln Electric System (LES), a municipally owned electric utility in Lincoln, Nebraska. He serves as a member of the company's executive committee and manages all of the organization's legal matters, including those related to electric utility restructuring and deregulation at regional and national levels.

While Mr. Curry joined the LES staff he has served as the company's general counsel for many years, when he was in private practice with Ginsburg, Rosenberg, Cathcart, Curry & Gordon. The firm merged with Erickson and Sederstrom, where he continued to advise LES until leaving private practice to work with the utility full time.

He is a prominent attorney and has held numerous positions on committees and boards for the Nebraska State Bar Association and Lincoln Bar Association. He is admitted to practice in Nebraska, 8th Circuit Court of Appeals, United States Court of Claims, and the United States Supreme Court. He is a Nebraska State Bar Association lifetime fellow, a high honor given by the Nebraska State Bar Foundation. Mr. Curry also has served on many civic, community, and church boards. He is a past president of junior achievement of Lincoln, has served on the Southeast Community College foundation board, and president's advisory council for the University of Nebraska. He also has been active with the Kiwanis Club of Lincoln, Nebraska, and the homestead Girl Scout counsel for many years, serving on the boards, as an officer, and on various committees.

Mr. Curry a received his B.A and J.D. cum laude from the University of Nebraska.

Wayne A. Harris

Wayne Harris is chief counsel of ACES Power Marketing. ACES Power Marketing is a national wholesale power and natural gas trading and energy risk management company based in Carmel, Indiana. His responsibilities include managing the legal requirements of the company and directing corporate compliance.

Prior to his current position, Mr. Harris was senior counsel – corporate finance for Cinergy Corporation in Cincinnati, Ohio and litigation counsel for its Indiana subsidiary PSI Energy, Inc. Before going in-house, Mr. Harris was a trial attorney for a national law firm based in Chicago.

Mr. Harris is chair of the midwest iso alternative dispute resolution committee. He is also this year's chair of the ACC Energy Committee. He is also chair-elect of ACC's Indiana Chapter and is a member of the board of the Traders Point Christian Academy. Mr. Harris is also this year's chair of the ACC Energy Committee.

Mr. Harris received a B.S. from the University of Pennsylvania's Wharton School of Business and his J.D. from the Indiana University School of Law in Bloomington, Indiana.

Wayne J. Lovett

Wayne J. Lovett is the executive vice president and general counsel of Mercury Air Group, Inc. in Los Angeles. He is responsible for the provision of all legal services for Mercury Air Group, its subsidiaries, and worldwide operations.

Prior to joining Mercury, he was also corporate counsel for Communications Transmission, Inc. (now Broadwing) in Austin, Texas. He has also served as the presiding judge of the Lakeway, Texas Municipal Court and as a trial lawyer.

While in Texas Mr. Lovett served on various bar committees including, the committee relating to the provision of legal services to people with disabilities. He is active in his church and has served on the vestry of his church for four terms.

Mr. Lovett has a B.A. from North Eastern University in Boston and is a graduate of South Texas College of Law in Houston.

Patti Phelan

Patti Phelan is currently legal counsel to NDI (Northern Digital), located in Toronto, in a contract position. NDI is a world-leader in the development and sale of sophisticated measurement systems, including optical tracking and magnetic tracking instrumentation. Working with NDI offices located in North America, Europe, and Asia, which supply product to the medical, research, and industrial markets, Ms. Phelan's responsibilities encompass a wide variety of matters relating to commercial contracts, trademarks, information technology (IT), employment, international business, and the operation of foreign offices.

Before moving in-house Ms. Phelan worked for many years in private practice (most recently with Smith Lyons, now Gowlings).

Ms. Phelan is active within ACC. As the first chair of ACC's New To In-House Committee she has lead the group in developing goals and procedures, arranging for speakers at its monthly conference calls, and increasing membership. Ms. Phelan has contributed to ACC's resources relating to disaster planning and recovery, most notably in an InfoPAK, a practices profile, webcasts, and a 2006 Annual Conference program. She has written numerous articles which have been published in the ACC Docket.

Ms. Phelan received a bachelor's from York University (Toronto, Canada) and a bachelor's from the University of Western Ontario. She is a graduate of the Law School at the University of Western Ontario, in London, Canada.

- Wayne J. Lovett - Mercury Air Group, Inc.
  - Located in Los Angeles, CA. near the airport
  - One lawyer legal department
  - Aviation services industry
    - Jet Fuel
    - Cargo
    - Government contracts
    - Formerly FBOs

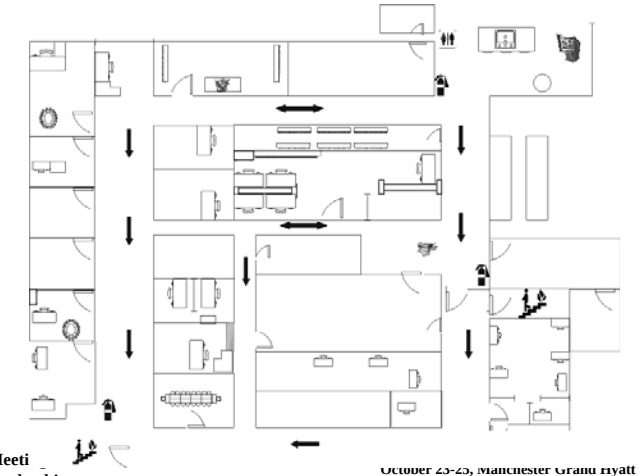
- Classification of emergency situations.
- Review each location.
- Classify priority locations.
- Determine for each location.
  - Most likely event to
  - Least likely event.
  - Determine priorities.
- The "Big One" is not the most likely.

Preparing for & Recovering From Disaster in the Small Legal Department

- Preparation of Disaster Recovery Manual
  - It is a collaborate effort.
  - It takes time – lots of detail.
  - Requires updating on a regular basis.
  - Plan should be tested.

Preparing for & Recovering From Disaster in the Small Legal Department

Detail of Mercury DR Recovery Plan



- Steps to take when it hits – Get on the phone. Where your manual comes in.
  - Who do you call?
    - Insurance people.
    - Your experts & recovery team.
    - Executive involvement.
    - The Press?
  - It will happen at night – have home numbers at home.

Preparing for & Recovering From Disaster in the Small Legal Department

- Nashville
- Tornado
- Birmingham Flood

ACC's 2006 Annual Meeting: The Road to Effective Leadership October 23-25, Manchester Grand Hyatt

- Its Not in the Manual 9-11
  - All planes Grounded.
  - Find out what is going on
  - Who is doing what
- Assume Nothing!

Preparing for & Recovering From Disaster in the Small Legal Department

- What Mercury learned
  - Be there the firstest with the mostest.
    - There is a limited amount of supplies.
    - People have families to tend to.
    - Employees wear out.
    - Everyone loves an emergency.
  - It is most likely worse than they said it was.
  - Unseen damage can be worse than the clear damage.
  - Don't spare the horses, worry about the budget later.

ACC's 2006 Annual Meeting: The Road to Effective Leadership

October 23-25, Manchester Grand Hyatt

- Computer & systems backup.
  - Disaster recovery room
  - Off site backup
  - The problem with crackberries
  - How to use lap tops as executive backups

Preparing for & Recovering From Disaster in the Small Legal Department

- Preparation for the "Big One"
  - We live in an earthquake zone
  - Studies – where the risks are & aren't
  - Disaster recovery rooms
  - Off site computer services
  - Food and survival supplies

ACC's 2006 Annual Meeting: The Road to Effective Leadership

October 23-25, Manchester Grand Hyatt

- Executive Preparedness
  - Everyday
    - It should be in your car trunk
      - Walk out kit
      - Three days food and water
      - Satellite phone
    - It should be in your travel bag
      - Smoke hood
      - mask

Preparing for & Recovering From Disaster in the Small Legal Department

- Terrorist threats
  - Why in the world do you have that?
    - Gas mask
    - Bio hazard suites
  - Biohazard rooms
    - Precut heavy duty plastic – two layers
    - Include area for large number of employees
    - Food and water
    - Sanitary facilities

ACC's 2006 Annual Meeting: The Road to Effective Leadership October 23-25, Manchester Grand Hyatt

- Kidnap Insurance
  - Not everyone needs it.
  - If you have it keep it quite.
  - But make sure the right people know about it.
  - What do you do with the wives? The company will not pay for private negotiation.

Preparing for & Recovering From Disaster in the Small Legal Department

- What we learned from Katrina
  - Use Coordinates for key people
  - Plan on doing without many employees until they can deal with home issues or help them.
  - It takes longer to get back up then you thought
  - Back up, back up and back up

ACC's 2006 Annual Meeting: The Road to Effective Leadership October 23-25, Manchester Grand Hyatt

Preparing for & Recovering From Disaster in the Small Legal Department

- Communications
  - The first thing to happen when people are overwhelmed by an event is that they stop communicating. (Dr. Nordenburg of NICD)
  - Find ways to communicate with employees
    - Web sites, 800 numbers – make sure they know them.
    - Phone systems and Cell phones may be out.
  - Have satellite phones and distribute numbers

Surviving the Pandemic

Wayne Harris
ACES Power Marketing LLC

Past Influenza Pandemics

Pandemic	Deaths in the U.S.	Deaths Worldwide
Spanish Flu (H1N1) 1918-1919	500,000	40 million
Asian Flu (H2N2) 1957-58	70,000	1-2 million
Hong Kong Flu (H3N2) 1968-69	36,000	700,000

Estimated Impact of an Influenza Pandemic in the U.S.

- Deaths: 89,000 – 207,000
- Hospitalizations: 314,000 – 734,000
- Outpatient Visits: 18 – 42 million
- Additional Illnesses: 20 – 47 million
- Economic Impact: $71.3 – 166.5 billion
- Total Infected: 43 – 100 million

What Should You Expect?

- A Widespread Outbreak
- Long Duration with Successive Waves
- Disruption in Essential Public Services
  - Transportation
  - Public Facilities
- Restrictions on Travel and Gathering

Preparing for an Influenza Pandemic

- What will you do if a large % of your workforce becomes infected?
- What impact will a pandemic have on your business?
- What can you do now to prepare for these events?
- Develop your strategy before it strikes
- Track pandemic issues and developments

Operations Planning

- ID key vendors, suppliers and customers
- ID and develop key contacts and chain of communications
- Anticipate supply/distribution chain interruptions
- Anticipate travel restrictions
- Cross-train employees

Workplace Health and Safety

- OSHA Requirements
  - General Duty Clause
- Training Obligations
  - infection control procedures

Promote Healthy Behaviors

- Gloves
- Encourage Employee Vaccinations
- Respiratory Protection
  - surgical masks
  - filtering face pieces
  - respirators
- Hygiene Practices
  - Post Notices Regarding: hand washing, coughing, tissues, etc.

Plan for the Following HR Issues

- Implementing Sick at Work Procedures
- Defensive Quarantines
- Social Distancing
- Employee Communications Strategy
- Scrutinize and Limit Business Travel
- Evaluate absence/medical leave policies
- Consider health plan coverage issues
- Consider workplace infection issues
- Anticipate large numbers of disability claims/absences

Additional HR Issues

- Reluctance of healthy employees to work and travel due to fears of exposure
- Plan for a reduced workforce: seek alternative sources of labor
- Impact of reduced customer demand: curtailed business operations and workforce
- Telecommuting

Leave and Disability Issues

- FMLA Leave, Sick/Medical leave, etc.
- Expansion of pre-existing leave policies
- Leave due to isolation or quarantine by Gov't
- Self-quarantine
- USERRA Issues (Nat'l Guard, Reserves)
- HIPPA Privacy protection for medical information
- Employee requests for hardship withdrawals or loans from 401(k) plans

Health Plan Coverage

- Review health plan policies
  - Coverage for vaccines?
  - Experimental treatments exclusion
  - Consider policy to pay for otherwise excluded expenses

Resources

- World Health Organization

  http://www.who.int/csr/disease/avian_influenza/en/
- Centers for Disease Control (CDC)

  http://www.cdc.gov/flu/avian/index.htm
- U.S. Government

  http://www.pandemicflu.gov
  - OSHA

  http://www.osha.gov/dsb/guidance/avian-flu.html

Business Continuity in Ten Steps

- Step 1: Develop Your Team
  - Identify a cross-functional team to assess risks
    - Senior Management
    - Labor & HR
    - Finance & Accounting
    - Communications
    - Legal
    - Marketing/Product Management

Business Continuity in Ten Steps

- Step 2: Conduct a Risk Assessment
  - Identify Risks
  - Historical Factors
  - Geographic Factors
  - Human Factors
  - Technological Factors
  - Industry Factors

Business Continuity in Ten Steps

- Step 3: Review Current Plans & Procedures
  - Evacuation Plans
  - Hazardous Material Response
  - Fire, Tornado, Hurricane, Earthquake
  - Bomb Threat
  - Workplace Violence
  - Pandemic

Business Continuity in Ten Steps

- Step 4: Assess How to Protect Employees
  - Clear Communication
  - Evacuation Planning
    - Identifying Exits and Routes to Safety
  - Sheltering
  - Emergency Supplies
  - First Aid
  - Assisting Persons with Disabilities

Business Continuity in Ten Steps

- Step 5: Create Relationships Before it Hits
  - Coordinate With Other Businesses
  - Build Media Contacts
  - Coordinate with Public Safety and Health Officials
    - Local Police, Fire, and Health Departments

Business Continuity in Ten Steps

- Step 6: Your Plan for Preparedness
  - Contingency Plans for Critical Systems and Services
  - Customer & Vendor Notification
  - Test Coordination of Secondary Facility
  - Continuity of Management (Who is in control?)
  - Insurance

Business Continuity in Ten Steps

- Step 7: Assign Personnel
  - Assign Team Members to Fulfill Vital Roles
    - Facilities
    - People
  - Provide Training
  - Provide Continuous Communication
  - Delegate Responsibilities
  - Establish Alternates that are Fully Trained

Business Continuity in Ten Steps

- Step 8: Identify Resources
  - Facilities
  - Equipment
  - Supplies
  - Insurance
  - Do not rely on the government for assistance

Business Continuity in Ten Steps

- Step 9: Practice Your Plan
  - Walk-through Drills
  - Tabletop Exercises
  - Classroom Instruction
  - Obtain an Independent Assessment

Business Continuity in Ten Steps

- Step 10: Review Your Plan
  - Update Your Plan at least every 6 months
    - Communicate the Plan to employees periodically

Mutual Aid Agreements/During the Disaster

- Douglas L. Curry
- Lincoln, Nebraska Electric System (LES)
  - Publicly-owned municipal electric system
  - 125,000 customers in 200 square mile service area
  - Peak load 780 MW
  - Revenue bond credits all rated AA
  - Total assets of $1 billion
    - Generation in Nebraska, Wyoming, Iowa
    - Transmission in Nebraska, Wyoming, Iowa, Missouri
  - Annual revenues $190 million

Mutual Aid Agreements/During the Disaster

- Service idiosyncrasies:
  - Nebraska law imposes an obligation to serve all retail customers in a state-chartered service area
  - Closing business is not an option
  - Skilled, technical workforce required

ACC's 2006 Annual Meeting: The Road to Effective Leadership October 23-25, Manchester Grand Hyatt

Mutual Aid Agreements/During the Disaster

- October 25, 1997: High winds, icing, 13 inches wet and heavy snow, full fall foliage
- Worst weather event in LES history

Mutual Aid Agreements/During the Disaster

- 55% of customers without service
- LES' construction and line clearance forces totaled only 120 workers
- Total work force actually deployed 470:
  - 20% LES
  - 40% Contractors
  - 40% Utility crews on loan
- Restoration accomplished in 8 days – LES working alone would have required a month or more

ACC's 2006 Annual Meeting: The Road to Effective Leadership

October 23-25, Manchester Grand Hyatt

Mutual Aid Agreements/During the Disaster

- Mutual Aid Agreements
  - Pre-emergency commitment of essential workers and equipment to be loaned
  - Industry peers are counterparties

Mutual Aid Agreements/During the Disaster

- Mutual Aid Agreement Content
  - Parties
    - Multiple signing companies become parties
      - Whether as Assisted Party or an Assisting Party dependent upon subsequent events
    - When requested in an emergency, all parties agree to provide essential personnel and equipment
      - Is the obligation to respond absolute? Best efforts?
  - Insurance and indemnity provisions

ACC's 2006 Annual Meeting: The Road to Effective Leadership October 23-25, Manchester Grand Hyatt

Mutual Aid Agreements/During the Disaster

- Content continued:
  - Assisting provider obligations:
    - Assurance of proper training and equipping
    - Inventory of supplied materials
    - Accounting for work hours and equipment
    - Provide crews with initial information regarding anticipated working conditions and performance requirements

Mutual Aid Agreements/During the Disaster

- Content continued:
  - Assistance recipient responsibilities:
    - Space planning and material staging for influx of workforce
    - Anticipate potential security needs
    - Organize and integrate all crews and materials
    - On-site communication arrangements
    - Local conditions, directions, mapping, environmental hazards
    - Precise specification of required skills and equipment
    - Accounting protocols to allocate expenses into its system of accounts
    - Establish all procedure and work specifications
    - Assign and "guide" all crews to specific job assignments
      - All assisting crews continue to work as a unit
      - Assisting party continues direct supervision unless contrary agreement
      - Guide records work hours and costs
    - Provide field inspection
    - Determine when "mutual aid" work is completed

Mutual Aid Agreements/During the Disaster

- More content:
  - Materials sharing understandings
    - What obligation to supply?
    - Who accounts?
  - Assisting party's vehicles and equipment
    - Operated exclusively by owner's crew?
    - Who provides maintenance and supplies?
    - Assign responsibility for logging miles and hours of use
  - Safety rules
    - Establish base requirements
    - Assisting crews adhere to their company rules at minimum
    - Assisted party determines additional precautions indicated by prevailing local conditions

Mutual Aid Agreements/During the Disaster

- And still more:
  - Personnel issues
    - Assisting crews paid under their company emergency work policy
    - Coordination of crew activities
      - Assisting party supervisors?
      - Assisted party coordinator?
      - Shared responsibility dependent upon activity?
    - Assisted party
      - Arranges local room and board, laundry service, emergency medical care
      - Establishes protocol for payment at sources of services
  - Establish all accounting, billing and payment provisions in the Mutual Aid Agreement, not after dire straights occur

ACC's 2006 Annual Meeting: The Road to Effective Leadership October 23-25, Manchester Grand Hyatt

Mutual Aid Agreements/During the Disaster

- Mutual aid in action

Wayne J. Lovett

Disaster Preparedness & Recovery Manual Forms

SAMPLE

Statement of Empowerment

A degree of risk exists in everything we do in life. Moore North America is committed to providing a safe working environment and protecting employees, visitors, and property through on-going loss prevention and management of potential disasters. To this end, Moore North America has assigned the development, implementation and administration of corporate safety and business continuation to our Business Continuation Team. Guidelines and assistance have been provided by all departments.

The designation of specific departments for this purpose does not excuse any manager from the responsibility of being alert to unsafe conditions and taking timely actions to correct them anywhere or anytime.

Creating and maintaining a safe working environment also requires the interest and cooperation of every employee of Moore North America. The observation of safety, security, and business continuation must be an integral part of our daily practices.

As the _____?_____of Moore North America, we have an obligation to our employees, shareholders, and the community to do everything in our power to continue to operate and maintain our status as the leader in the _____ industry.

_____	_____
Chairman, Board of Directors	Vice Chairman
_____	_____
President and CEO	Sr. Vice President/General Counsel
_____	_____
Chief Financial Officer	Vice President, Administration

Risk Management Team

Team Captain:
Alternate:

Responsibilities:

- Responsible for insurance programs of company to control risks and losses
- Advise other teams regarding insurance coverage claim issues
- Assist with the preparation and settlement of claims
- Coordinate programs to reduce/eliminate occupations injuries
- Provide a secure environment

Team Members:

NAME	*EXT. #/ OFFICE*	*HOME #*	*CELLULAR #*	*PAGER #*
Andy Fairfax			310-200-6010	

Disaster Recovery Functions:

- Assist and coordinate gathering engineering reports for assessed damages and ensuring submittal of loss is processed through appropriate coverage
- Coordinate disaster committee/team response, provide documents and policies relating to recovery process
- Assist and coordinate loss control efforts that will mitigate further potential losses. Assess safety critical processes to ensure recovery does not create further liabilities
- Assist and coordinate all security efforts relating to public access, physical property and employees on premises
- Coordinate the review by the damage Assessment team with the adjusters and their experts

Non-Disaster Functions:

- Plan, implement and coordinate programs to reduce or eliminate occupational injuries, illnesses, deaths and financial losses
- Direct personnel involved with establishing promotions, maintainings from security and property protection programs, fire protection, physical security, investigations of criminal acts
- Plan, direct, or coordinate risks and insurance programs of company to control risks and losses
- Direct and coordinate all claims (casualty) from first advise negotiation, settlement, and reserving practices
- Meet quarterly to review and update plan
- Participate in annual disaster and emergency exercises
- Participate in follow-up evaluation of annual drill and revise plan as necessary

Divisional Employee by Name		
Employee Number: **Employee Name:** **Title:** **Address:** **Address:** **City:** **State:** **Coordinates:** **Home Phone:** **Work Phone:** **Alt1. Phone:** **Alt2. Phone:** **Alt3. Phone:**	 **Zip:** **Ext.** **Ext.** **Ext.** **Ext.**	**Emergency** **Primary/Back:** **Priority:** **Backup:** **Control:** **Offsite:**
Employee Number: **Employee Name:** **Title:** **Address:** **Address:** **City:** **State:** **Coordinates:** **Home Phone:** **Work Phone:** **Alt1. Phone:** **Alt2. Phone:** **Alt3. Phone:**	 **Zip:** **Ext.** **Ext.** **Ext.** **Ext.**	**Emergency** **Primary/Back:** **Priority:** **Backup:** **Control:** **Offsite:**
Employee Number: **Employee Name:** **Title:** **Address:** **Address:** **City:** **State:** **Coordinates:** **Home Phone:** **Work Phone:** **Alt1. Phone:** **Alt2. Phone:** **Alt3. Phone:**	 **Zip:** **Ext.** **Ext.** **Ext.** **Ext.**	**Emergency** **Primary/Back:** **Priority:** **Backup:** **Control:** **Offsite:**
Employee Number: **Employee Name:** **Title:** **Address:** **Address:** **City:** **State:** **Coordinates:** **Work Phone:** **Alt1. Phone:** **Alt2. Phone:**	 **Zip:** **Ext.** **Ext.** **Ext.**	**Emergency** **Primary/Back:** **Priority:** **Backup:** **Control:** **Offsite:**

Computer Equipment
Equipment Description: Serial #: Vendor Name: Vendor Number:
Equipment Description: Serial #: Vendor Name: Vendor Number:
Equipment Description: Serial #: Vendor Name: Vendor Number:
Equipment Description: Serial #: Vendor Name: Vendor Number:
Equipment Description: Serial #: Vendor Name: Vendor Number:
Equipment Description: Serial #: Vendor Name: Vendor Number:
Equipment Description: Serial #: Vendor Name: Vendor Number:

FUNCTION PRIORITY QUESTIONNAIRE

The Business Impact Analysis phase identifies the critical business functions at the level of business units and their major supporting systems and applications. It is critical prior to the prioritization phase of the BIA to have a complete list of all critical functions performed by each unit. This form will assist each unit in compiling a list of all critical functions, as well as allowing you to assign a recovery time to each function.

Business Resumption. In a recovery, the Business Units will not be able to perform all of the tasks they normally perform; the delivery of certain products and services must be curtailed. Each business unit is therefore asked to identify the most important services that it provides on the basis of their contribution to the overall mission of the organization. These critical services become the focus of the recovery effort.

Each function identified by the Business Unit requires a certain level of resources to recover it. In a disaster, however, resources are limited. Therefore, the recovery team will make a decision on how to allocate recovery resources; this decision is based on the value to the mission of your organization.

Off-Site Storage Locations
Name: Contact Name: Business Number: Home Number: Pager/Cellular Number: Directions to site:
Name: Contact Name: Business Number: Home Number: Pager/Cellular Number: Directions to site:
Name: Contact Name: Business Number: Home Number: Pager/Cellular Number: Directions to site:
Name: Contact Name: Business Number: Home Number: Pager/Cellular Number: Directions to site:

FUNCTION	Department	DESCRIPTION	PRIORITY
Accounts Payable	Accounting		
Cash Management	Accounting		
Cellular Phones	Comm.		
Communications - Local/Distance	Comm.		
Communications - voice mail	Comm.		
Employee Safety/Facility Safety/Cargo Security	Air Cargo		
Government Liaison	Air Cargo		
Keys	Admin.		
Office Supplies	Admin.		
Payroll	Accounting		
Purchasing truck and forklift parts	Purchasing		
Risk	Risk Mgmt.		
Safety	Risk Mgmt.		
Security	Risk Mgmt.		
Service Standard Oversight Procedures	Air Cargo		
Terminal Supervision	Air Cargo		
Vehicle Permits	Admin.		
Accounts Payable	Accounting		
Billing	Accounting		
Cleaning service, waste haul, uniform service	Purchasing		
Compensation	HR		
Customer Liaison	Air Cargo		
Facilities maintenance repairs and upkeep	Purchasing		
General Accounting	Accounting		
Service fax machines and typewriters	Purchasing		
Stationery and uniforms	Purchasing		
Claims	Risk Mgmt.		
Office Furniture	Admin.		
Staffing	HR		
Benefits	HR		
Copy Machines	Admin.		
Employee Compensation	Air Cargo		
Employee Hiring/Disciplinary Actions/Conflict Resolution	Air Cargo		
Employee Relations	HR		
Purchasing equipment and support	Purchasing		
Records Administration	HR		

Foregoing Material Developed by
Jeff Crenshaw
Principal
Continuum Recovery
2600 Popular Ave
Memphis Tennessee 3811
Used by Permission. Not for commercial reproduction and use; may be used by participants in Association of Corporate Counsel 2006 Annual Meeting: The Road to Effective Leadership.

One Call Response and Recovery

In the hours following a disaster, time is of the essence. The quicker recovery begins, the more property can be salvaged, and the sooner you can be back in business.

Continuum Recovery Offer These Advantages:

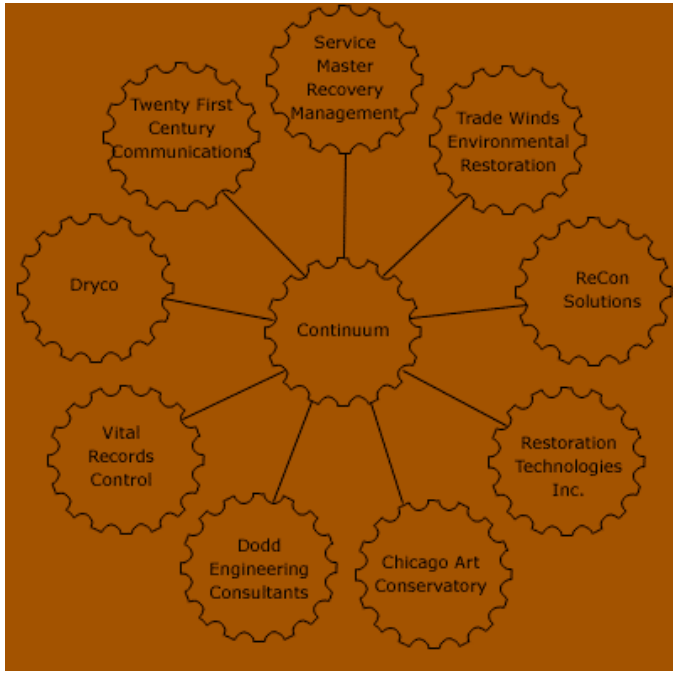
- One call mobilizes everything you'll need, no more, no less
- Quick response - you don't waste time calling around the country to locate specialists, which means we can get to the site and get to work faster
- Rapid damage assessment
- Our close partnerships mean we function efficiently and effectively
- No time lost assembling a team and defining responsibilities

One Source Recovery

You don't need any additional complications following a business disaster. You need experts who can orchestrate your recovery smoothly and with a minimum of disruption and downtime.

You Need:

- Continuum Recovery's vast experience handling all types of disasters all around the world
- Continuum Recovery's state-of-the-art technology backed by years of research and experience
- Assurance that you're working with the best in the business
- Solutions to your disaster recovery problems
- One contact to work with for coordinated communication
- Cost-conscious management, and cost-effective approaches
- Pre-contract commitments



CONFIDENTIAL

ABC Client
Earthquake Risk Assessment

Prepared by The Lockton Companies
August 2004

ABC Client
Earthquake Risk Assessment

This report has been prepared by Lockton Companies (Lockton) for the sole and exclusive use of ABC and may not be used or relied upon by others without the prior written consent of Lockton Companies.

This report, and the analyses, models and predictions contained within, is based on data provided by ABC and compiled using RiskLink, a proprietary RMS computer risk assessment system. This system is based on scientific data, mathematical and empirical models, and the encoded experience of earthquake engineers, structural engineers, geologists, seismologists, and geotechnical specialists. The accuracy of the loss estimations presented within this report is largely dependent on the accuracy and quality of data supplied to Lockton by ABC.

Summary

Lockton analyzed ABC's exposure and potential losses related to earthquake events. Lockton used RMS' proprietary software (RiskLink 4.3) to analyze this portfolio, quantifying the full range of potential earthquake losses. Based on this analysis, Lockton has drawn the following conclusions:

ABC U.S. Earthquake Portfolio:

- Over the next 100 years, there is a 1.0% probability that ABC can expect at least one event to occur that will cause at least $6.9 million in ground-up loss. Over the next 250 years, there is a 0.4% probability that ABC can expect at least one event that will cause at least $10.36 million in ground-up loss.

- On an average annual loss basis, the ABC U.S. earthquake portfolio is expected to sustain approximately $428,000 in ground-up loss.

Analysis Descriptions

Lockton conducted a series of probabilistic analyses to assess the earthquake risk to which ABC is exposed. These analyses included an Occurrence Exceeding Probability (OEP™) analysis and an Average Annual Loss analysis. A data resolution analysis was also completed. Each of these analyses is briefly described below.

Occurrence Exceeding Probability Analysis:

The Occurrence Exceeding Probability analysis represents a comprehensive analysis that a single occurrence will exceed a certain threshold. For each analysis, different-sized events are simulated, beginning with the maximum credible event and working down in magnitude. These events are then sorted by loss, from largest to smallest loss, for each financial perspective separately. A cumulative probability, which represents the probability of incurring a loss of the specified amount or greater (i.e., an occurrence exceeding probability), is then calculated for each loss level by aggregating the individual event probabilities, beginning with the probability associated with the maximum loss. A sample of an OEP analysis is given in the table below. The Ground Up Loss and Annual Loss Probability columns represent the two elements used to create an OEP curve like the ones shown on page 6.

Loss Return Period (Years)	Annual Loss Probability	Ground Up Loss
1000	0.10%	$2,000,000
500	0.20%	$1,000,000
250	0.40%	$750,000
200	0.50%	$500,000
100	1.00%	$250,000

The table above shows that there is a 0.4% annual probability of losing $750 thousand or more as a result of at least one event. In other words, a loss of $750 thousand or greater would be expected to occur on average every 250 years.

Since the OEP analysis considers all events and their probabilities, it is the cornerstone analysis for understanding the probability of various levels of overall portfolio loss. Using this analysis, the probability of a specific dollar level of loss or the level of loss associated with a specific probability can be established.

The earthquake PML's for ABC are shown on page 6.

Average Annual Loss Analysis:

Also known as Pure Premium and part of the Exceeding Probability analysis, the Average Annual Loss or AAL is an estimate of the loss portion of a premium that a carrier would charge or the amount that should be set aside to balance the catastrophe risk over time. The concept is similar to ones own auto maintenance or repair savings. Based on past experience and the opinions of experts, the projected lifetime maintenance/repair expenses on ones automobile are a certain amount. During most years you will have little or no maintenance expenses and in turn be building a surplus. However, you will reduce your surplus due to frequent minor expenses and infrequent moderate or major expenses. Probabilities say that significant catastrophe losses will not occur for many years, even hundreds or thousands of years. Reality though says that a significant loss, however unlikely, could happen tomorrow.

The Average Annual Loss analysis calculates a single loss number for the portfolio that reflects the average amount of loss that can be expected annually based on all possible earthquake events that could impact the portfolio. Average annual loss is calculated by weighting all potential losses by their associated annual probabilities. This analysis is also useful for determining the relative risk of various components of the portfolio.

The average annual loss analysis is also used to determine a company's locations that have the biggest exposure to loss. The key drivers of loss for ABC are shown on page 7 with the corresponding average annual loss figure.

Data Resolution:

Data Resolution Level (Geocoding) is the process of finding the latitude and longitude of a location based on its address. Hazard-lookup retrieves data on the local conditions and potential hazards for a particular location. The accuracy of the analysis highly depends on the both the resolution level achieved as well as the level of detail given to us for each particular location. The address of a location is a major contributor in determining the damageability of a location and its contents. The level of accuracy of the data provided will directly impact the quality and accuracy of the analysis.

Page 9 shows the detailed resolution level for ABC. As you can see ___ of the ___ locations were geocoded to street address and __ of the ___ locations were geocoded to the postal code resolution level. The four levels of resolution in order of accuracy with street address being the most accurate are:

- Street address
- Postal code (Zip Code)
- City
- County or Province

Earthquake Exposure Overview

Lockton analyzed ABC's exposure to earthquakes with ABCs' provided schedule of values. Summary information for the earthquake data is provided below.

SUMMARY OF DATA PROVIDED TO RMS

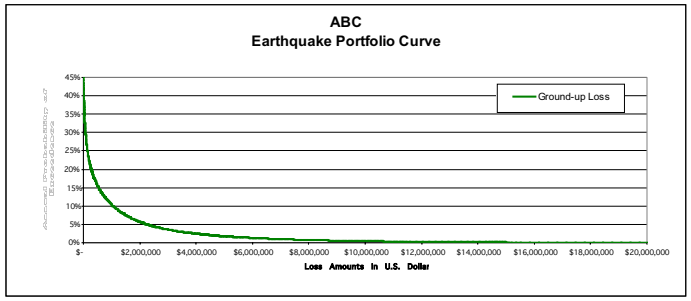
Data	Analyzed by RMS	Comments
EQ Geographic Regions	California Region, Southern Rockies, and Great Basin	
Number of Locations	207	
Total Building Limits	$100,437,000	
Total Contents Limits	$51,719,256	
Total BI Limits	$101,061,588	
Address Information	Street Address, City, State & Postal Code	
Construction Types	Yes	RMS mapped ABC construction classes provided to RMS construction classes.
Occupancy Types	Yes	RMS mapped ABC occupancy types provided to ATC occupancy types.
Deductibles	Yes	$100,000

ABC

Earthquake Portfolio

Table of Losses for Selected Return Periods

Loss Return Period (Years)	Annual Loss Probability	Ground Up Loss
1,000	0.10%	$15,873,550
500	0.20%	$13,074,832
250	0.40%	$10,362,037
200	0.50%	$9,507,542
100	1.00%	$6,935,530



ABC

Earthquake Portfolio

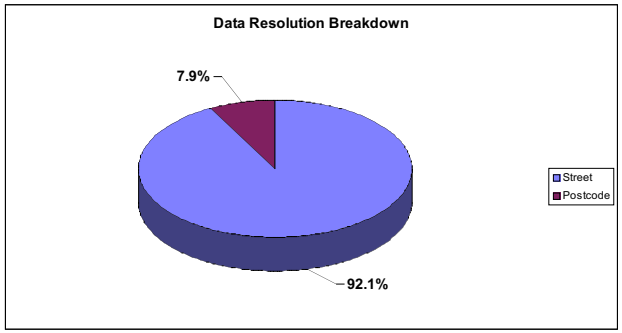
AAL by Property

Rank		Address	City	County	Zip Code	Average Annual Loss By Loc.	% of Total AAL	Cumulative % of AAL
1	4199	CAMPUS DR	IRVINE	ORANGE	92612	$ 42,334.490	9.89%	9.89%
2	13502A	HAMABC LN	BALDWIN PARK	LOS ANGELES	91706	$ 9,614.11	2.25%	12.14%
3	1333	N Virginia BldgC	Baldwin Park	LOS ANGELES	91706	$ 7,672.98	1.79%	13.93%
4	190	N H ST	SAN BERNARDINO	SAN BERNARDINO	92410	$ 6,453.50	1.51%	15.44%
5	1944	S TIPPECANOE AVE	SAN BERNARDINO	SAN BERNARDINO	92408	$ 6,411.99	1.50%	16.93%
6	3927	GRAND AVE	CHINO	SAN BERNARDINO	91710	$ 5,524.71	1.29%	18.23%
7	9855	SIERRA AVE	FONTANA	SAN BERNARDINO	92335	$ 5,328.75	1.24%	19.47%
8	333	JEFFERSON ST	SAN FRANCISCO	SAN FRANCISCO	94133	$ 5,227.50	1.22%	20.69%
9	381	W ESPLANADE DR	OXNARD	VENTURA	93036	$ 5,138.41	1.20%	21.89%
10	32060	Union Landing Blvd	Union City	ALAMEDA	94587	$ 5,047.53	1.18%	23.07%
11	798	REDWOOD HWY	MILL VALLEY	MARIN	94941	$ 5,004.36	1.17%	24.24%
12	12599	FOOTHILL BLVD	RANCHO CUCAMONGA	SAN BERNARDINO	91739	$ 4,811.28	1.12%	25.36%
13	23035	HEMLOCK AVE	MORENO VALLEY	RIVERSIDE	92557	$ 4,640.44	1.08%	26.45%
14	25220	THE OLD RD	NEWHALL	LOS ANGELES	91381	$ 4,494.65	1.05%	27.50%
15	8955	FOOTHILL BLVD	RANCHO CUCAMONGA	SAN BERNARDINO	91730	$ 4,400.14	1.03%	28.53%
16	4310	ONTARIO MILLS PKWY	ONTARIO	SAN BERNARDINO	91764	$ 4,339.05	1.01%	29.54%
17	6015	JOHNSON DR	PLEASANTON	ALAMEDA	94588	$ 4,251.87	0.99%	30.53%
18	2600	STEARNS ST	SIMI VALLEY	VENTURA	93063	$ 4,190.79	0.98%	31.51%
19	2950	E CAPITOL EXPY	SAN JOSE	SANTA CLARA	95148	$ 4,107.87	0.96%	32.47%
20	2885	W FLORIDA AVE	HEMET	RIVERSIDE	92545	$ 4,071.09	0.95%	33.42%
21	2235	S MOUNTAIN AVE	ONTARIO	SAN BERNARDINO	91762	$ 4,002.68	0.94%	34.36%
22	2270	SAN RAMON VALLEY BLVD	SAN RAMON	CONTRA COSTA	94583	$ 3,890.21	0.91%	35.27%
23	1891	E G ST	ONTARIO	SAN BERNARDINO	91764	$ 3,833.04	0.90%	36.16%
24	1364	HOLIDAY LN	FAIRFIELD	SOLANO	94534	$ 3,824.92	0.89%	37.06%
25	1837	W FOOTHILL BLVD	UPLAND	SAN BERNARDINO	91786	$ 3,815.30	0.89%	37.95%
All Others						$ 265,609	62.05%	100.00%
Total						**$ 428,041**	**100.00%**	

ABC

Data Resolution Report - Earthquake Exposures

Data Resolution Level	Locations		Values	%
Street	173	$	233,259,024	**92.12%**
Postcode	20	$	19,958,820	**7.88%**
	193	**$**	**253,217,844**	



Key Methodologies and Assumptions

The loss estimations presented in this report are based on a combination of inputs: data supplied by ABCs Management, RiskLink 4.3™ expert systems and methodologies, and a number of analytical assumptions. Key methodologies and assumptions are outlined below.

Lockton was provided with a data set describing ABC' exposure to earthquake events throughout the U.S. The ABC data set contained street level address information, occupancy types, construction information, sprinkler information as well as building, contents, and business interruption values.

ABC Earthquake Portfolio

VALUES

Lockton was provided with a data file containing 207 records with a total value of $253,217,844.

CONSTRUCTION CLASS

The AABC data set included three construction types. Lockton mapped the construction classes to RMS – 1 class (Wood), and RMS – 3B4 class (Tilt-up) for the purpose of this analysis.

YEAR OF CONSTRUCTION INFORMATION

The ABC data set included year built information for all of the locations. Lockton incorporated year built information where provided for the purpose of this analysis.

OCCUPANCY TYPES

The ABC data set included three occupancy types. Lockton mapped the occupancy types to ATC types:

- Type 5 (Retail Trade)
- Type 7 (Personal and Repair Services)
- Type 8 (Professional, Technical, and Business Services)
- Type 11 (Parking)
- Type 13 (Light Fabrication and Assembly)
- Type 14 (Food and Drugs Processing)
- Type 17 (High Technology)
- Type 37 (General Commercial)
- Type 38 (General Industry)
- Type 39 (Miscellaneous)

NUMBER OF STORIES

The ABC data set included number of story information for all of the properties. Lockton incorporated number of stories where provided for the purpose of this analysis.

SPRINKLER DATA

The ABC data set included sprinkler information for all of the properties. Lockton incorporated sprinkler information where provided for the purpose of this analysis.

Note: Construction class, year of construction, occupancy type, and number of stories all contribute to the damageability of a location and its contents.

OTHER ASSUMPTIONS:

- Contents were assumed to be of average damageability.
- All analyses were performed in RiskLink.

Mark A. Racunus
Producer
Lockton Insurance Brokers, Inc.
725 S. Figueroa 35th Floor
Los Angeles, CA 90017
T 213 689-2309
F 213 689-0521
C 310 971-0521

Lockton's unique blending of services enables our Associates to call upon each other's expertise and to work together to achieve a level of unparalleled service for our clients. Our Risk Control, Mergers & Acquisitions and Risk Management departments interact directly with our Commercial Insurance Department to develop the most effective solutions for our clients.

We carefully match the experience and specialty of our consultants with specific client needs. Creative solutions to risk are devised by exposing potential and current risks, then dedicating our resources and knowledge to accomplishing our clients' most challenging objectives.

Lockton Risk Management Associates are experienced consultants with the proven skills and specialized expertise required to handle the most complex risk design, marketing or analytical projects. Our Associates have backgrounds in accounting, banking, finance, insurance and reinsurance. This diversity provides a broad framework for creative problem solving.

We work hand-in-hand with other Lockton departments to assist clients with highly specialized needs in areas such as captive formation, taxation, capital markets, loss modeling and more.

By carefully applying actuarial principles and other forecasting models, we quantify critical risk areas, and develop recommendations for reducing, financing or transferring risk.

Our approach begins with an in-depth Risk Management Survey; the data then forms the basis for developing a comprehensive risk management program. We utilize an extensive program design process which ensures our clients have the most appropriate, cost-effective risk financing program for their needs.

Producer Driven Business Model

Other companies used by Mercury Air Group, Inc.

Michael D. Stall, MSCE, PE

- President and founder of Managed Response, Inc., a disaster recovery management firm, Houston Texas.
- Managed over $250 million in disaster recovery projects including airports, power plants, chemical plants, food processing plants, condos, hotels and resorts and other facilities that have suffered the effects of fires, floods, hurricanes and earthquakes

John Enticknap, Principal of Aircraft Business Strategies Group, Atlanta, Georgia.

- Over 40 years in aviation businesses.
- Over 20 years in FBO business.
- Provides business continuity planning and related business management services

Appendix A: Sample Emergency Management Plan

ACME Industries Emergency Management Plan

ACME Industries

Emergency Management Plan

Purpose of Plan

- Life safety during an emergency.
- Stabilization of the emergency.
- Human emotional and physical wellbeing during an emergency.
- Effective communication throughout an emergency response.
- Property conservation during a state of emergency.
- Business continuity.

Plan Availability

A copy of the emergency management plan will be made available to each employee and will be available for review by vendors and customers. Updated versions of the plan are located in the following locations: Director of Administration's Office, Human Resources and Environmental, Health and Safety Departments and the two locations established as emergency operations centers (identified under the facilities section in the plan). The plan is also available through the company's Intranet website.

Review and Revisions

As a living document, this Plan and its annexes should be expected to be under continual revision. It will be reviewed annually and following incidents for updates. Training on the plan will be conducted at least once annually.

Emergency Management Team

In preparation for, response to, and recovery from emergency incidents, Acme Industries shall maintain a positive, safe working environment for workers, vendors, clients and guests. Each department shall establish its protocols in accordance with risk and safety issues identified for its specific area, and in cooperation with the guidelines provided in this plan. The Environmental, Health and Safety Director is designated as the Facility Emergency Management Coordinator (FEMC) and will be responsible for overseeing all emergency preparedness, response, recovery, and mitigation issues. The FEMC leads the Emergency Management Team, which will consist of one representative and an alternate representative from the following departments:

- Administration
- Public Relations
- Human Resources
- Finance and Accounting
- Legal
- Purchasing
- Information Technology
- Engineering, Utilities, and Maintenance

In making recommendations to fill the above positions, managers should consider individuals with decision-making authority. The FEMC will also select one or two individuals to serve on the team who are not at the management level.

Within the normal operations of the company, preparations for emergencies shall be made by:

Task:	Responsible Unit:
Maintaining a written Emergency Plan	Emergency Management Team
Maintaining training records	Human Resources
Maintaining written and verbal communications	Public Relations
Documenting drills/exercises and their critiques	Emergency Management Team
Using community response organizations in planning	FEMC/Emergency Management Team
Maintaining company supplies	Purchasing
Designating emergency facilities	Emergency Management Team
Establishing mutual aid agreements	FEMC/Emergency Management Team
Preparing a resource inventory	Finance and Logistics

Standard Operating Procedures (SOPS) for performing the above tasks (to include checklists) will be developed by the responsible organization. Upon approval by the FEMC, these SOPS will be maintained by the individual unit supervisors and the FEMC.

Risks

A Risk Assessment conducted by the Emergency Management Team identified the following hazards to which the company may be vulnerable:

Natural Hazards: Hurricane, tornado, high winds, winter storms, heavy rains, hail, flooding, extreme temperatures.

Technological/Infrastructure Disruptions: Fire, explosion, or hazardous materials incidents; building collapse; failure of telecommunications, radio, television, information systems, or affiliated technologies; elevator malfunction, utility service interruption (gas, water, electricity, sewer, heat).

Terrorist Incidents: Bomb threats, building takeovers, hostage situations, sabotage, cyber-terrorism.

Human-caused Events and Hazards: Civil disturbances, labor stoppages (e.g. strikes), workplace violence, special events, and transportation accidents.

The Team considered the hazards listed above and applied the following factors, among others, to determine those that posed the most likely and significant risks to the company and its employees:

- Past History and Frequency – The types of emergencies identified include fires, hazardous materials releases, floods, hurricanes, tornadoes, and power outages.
- Geographic Concerns – The primary concerns identified based on geography are the proximity to two water treatment facilities and four industries that use extremely hazardous substances in their processes. ACME Industries is within the "vulnerable zone" identified for all six of the above hazardous materials facilities, all of which have extremely hazardous substances. ACME must consider the potential for accidental, as well as intentional, releases from these facilities (these facilities have all been identified as potential terrorist targets). In addition, another significant risk identified based on the company's location is that certain portions of the company's property that are prone to flash flooding in heavy downpours.

- Physical Layout of the facility – The most significant areas of concern regarding the facility's layout and how it may affect the risk of an emergency occurring were evacuation (both on-site and off-site) and the lack of sufficient space for sheltering-in-place.
- Existing Standards – Effectiveness of existing plans and procedures and employees' knowledge and understanding of what to do in all types of emergencies.

The risk assessment was used to identify areas within the company that require additional focus for emergency planning and response and to help prioritize resources. The risk assessment also will be used to identify areas where mitigation measures can be applied to help prevent or at least reduce the impacts of future potential emergencies or disasters. The following mitigation efforts – all of which are either completed or underway – were initiated based on findings of the risk assessment:

- Development of flood walls on the southeastern section of company property to prevent future flash flooding from occurring;
- Designation of an alternate facility location (identified later in plan) to which key staff may relocate temporarily if the company is directly impacted by an emergency or disaster;
- Implementing procedures for daily backup of computer systems;
- Storing and maintaining current, critical duplicate data at the offsite facility; and
- Providing financial assistance to neighboring hazardous materials facilities for installation of siren systems to warn ACME employees and others when a potential offsite hazardous materials release has occurred.

This plan and the emergency procedures identified in Annex A, in addition to providing a structure for preparing for, responding to, and recovering from emergencies or disasters, are examples of mitigation measures taken to reduce the impacts of future events.

Existing Plans and Procedures

The ACME Industries Emergency Management Plan complements existing facility plans and incorporates some of the elements contained in those plans. The Emergency Management Plan is intended to be comprehensive in scope; however, it does not supersede plans developed for specific types of emergencies. SOPs provided in Annex A have been developed to instruct employees on specific actions to take in certain types of emergency situations. In addition, other SOPs (not included in this document) have been developed to provide guidance to Emergency Management Team members on how to carry out their individual roles and responsibilities in preparing for, responding to, and recovering from disasters.

Community Coordination

As an active member of the DC Local Emergency Planning Council, ACME Industries has fostered relationships with numerous other private sector organizations as well as local emergency responders, volunteer, and community organizations. ACME Industries is actively involved with the community, sponsoring numerous events annually, and conducts regular facility tours to provide citizens with a better understanding of its processes and how the company prevents, plans for, and responds to all types of emergencies. Memorandam of Understanding are in place between ACME and four other companies (BCME, CCME, DDME and EEME) located in the immediate area, to assist each other during emergencies and ensure that the needs of employees and their families needs are addressed.

Business Continuity

To prevent or reduce the potentially devastating impacts that emergencies can have on the company's continued business operations, ACME has instituted numerous measures. The company takes a proactive approach to identify all of its critical resources, systems, and functions; it has several plans ready to be activated at the first sign of an emergency situation. Business continuity measures are incorporated

Appendix A: Sample Emergency Management Plan
Acme Industries Emergency Management Plan

throughout ACME's comprehensive emergency management plan, with specific responsibilities assigned to various Emergency Management Team members, depending on their areas of expertise. These are provided in more detail in the "Roles and Responsibilities" section of this document. Annex B provides tables that cover the areas that will be considered in business continuity planning. These tables, identified below, are to be used by the individual(s) to track information and resources for business continuity purposes.

Table 1: Core Business Functions

These are functions that should be inventoried to ensure that connectivity is maintained with ACME's vendors – as well as with the company's other general business functions, such as maintenance and database support. The table lists the specific functions and identifies the recipients of the functions, the maximum allowable number of days for disruption of service, the criticality (high, medium, low) of the function, and the individual who serves as the point of contact. The Finance/Logistics Coordinator, in coordination with the Information and Planning Coordinator, is responsible for ensuring that this table is maintained at all times.

Table 2: Critical Systems and Resources Functions

These are functions that that are critical to the continued operation of ACME Industries. Facilities, including backup facilities to conduct emergency operations, ensure the safety of employees and other activities, communication systems, security systems, information management systems, and other resources are accounted for in the checklist. The business functions of each of these systems and resources should be identified as well as their locations. The Communications and Infrastructure Coordinator, in coordination with the Information and Planning and Security Coordinators, is responsible for maintaining the checklist.

Tables 3 and 4: Critical Vendor and Customer Lists

This list should be maintained to ensure that ACME's critical vendors and most loyal customers are kept informed of emergency or potential emergency situations within the company that may disrupt services temporarily. In the event that ACME's services are temporarily interrupted, it is important to let our critical vendors and customers know to allow them to plan accordingly. On the other hand, in the event that we are able to maintain operations throughout a community-wide disaster, it is important to contact them to let them know that we are available to them. The Finance and Logistics Coordinator is responsible for maintaining these critical vendor and customer lists.

Table 5: Business Partners and Support Providers List

This list will be used to ensure that important organizations that may be needed during emergencies can be readily contacted. The organizations include the DCEMA, the local fire department, police, insurance providers, utility providers, and the companies with whom ACME has entered into Memorandam of Agreement. Volunteer organizations, such as the Local Emergency Planning Council and the American Red Cross, should also be listed. Current information on points of contact (and alternates), telephone number, mailing address, fax, and e-mail address should be provided on this list. The Facility Emergency Management Coordinator or his/her designee is responsible for maintaining this list.

Table 6: Secondary Location Profile

The security center of the company satellite office/warehouse located at 800 Industrial Boulevard has been designated as the secondary location for the Emergency Operations Center (EOC) in the event that the primary EOC is not available. This is the location where the company Emergency Management Team and other key company personnel will convene in the event that the primary EOC is impacted. (See the "Facilities" section of this document for additional information on the EOC capabilities.) This location has additional office space which will serve as a secondary location

for key staff not involved in emergency response efforts to congregate to ensure that business operations continue. The satellite office is equipped with current company data and resources (including network accessibility, telephones, facsimile, critical records) to ensure a smooth transition in the event of an emergency or disaster. The Facility Emergency Management Coordinator or his/her designee is responsible for ensuring that the secondary location profile is maintained and that all employees with emergency responsibilities are completely familiar with the procedures for activating the secondary facility.

Continuity of Management

The Company Chief Executive Officer (CEO) is in charge of overseeing all business operations and will direct business operations before, during, and after emergencies or disasters. In the event that the CEO is not available, the line of succession is as follows:

- Director of Administration
- Assistant Director of Administration
- Director of Human Resources
- Director of Finance and Accounting

Emergency Response

ACME Industries shall respond to emergencies using the standards of the nationally recognized Incident Command System (ICS) as its guideline. The ICS enables one or more responding agencies to initiate and conduct a coordinated response to an incident. The priorities of the ICS system are:

- Life safety,
- Incident stability, and
- Property conservation.

Within the Incident Command System, authority is delegated under five major areas of incident management:

- Command
- Planning
- Operations
- Logistics
- Finance and Administration

In the event of non life-threatening situations, activation of the Emergency Plan will initiate an internal response using ICS protocols as guidelines.

In the event of an emergency requiring response by outside emergency response agencies, the command of the incident will be relegated to the DCEMA or other proper emergency response authorities. ACME personnel will concentrate on maintaining the safety and operation of the company's employees and property, and provide assistance and support to the emergency responders, as requested.

Appendix A: Sample Emergency Management Plan
Acme Industries Emergency Management Plan

The ACME Emergency Management Team will be assembled and other company personnel may be recruited to assist with managing the emergency. The FEMC (Environmental, Health and Safety Director) shall serve as the Director of the Emergency Management Team and assign duties of incident management above. In the Environmental, Health and Safety Director's absence, the chain of command is:

- Assistant Director, Environmental, Health and Safety
- Director, Engineering, Utilities and Maintenance
- Assistant Director, Engineering, Utilities and Maintenance
- Director, Public Relations

NOTE: This chain of command relates only to emergency response. For line of succession for running business operations, see the "Business Continuity" section of this plan.

Emergency Personnel Roles and Responsibilities

Facility Emergency Management Coordinator (FEMC)

The FEMC has primary responsibility for effectively managing any incident that might occur on or affect ACME Industries. The FEMC is the Emergency Management Team leader and will be responsible for taking command of the Emergency Operations Center and issuing necessary directives. Following are guidelines for the FEMC:

- Report to the designated Emergency Operations Center
- Determine need to relocate to an alternate EOC/work facility. Coordinate with the Information and Planning Coordinator.
- Ensure that the Emergency Management Team and key staff are familiar with alternate facility location relocation procedures.
- If not already determined, decide if evacuation or partial evacuation of the building is required.
- Notify outside emergency response agencies if their assistance is required or if the incident threatens to affect an offsite population.
- Ensure that notifications are made to appropriate local, state, and federal authorities to comply with applicable regulations.
- Contact the CEO, the Director of Administration, and the Director of Human Resources
- Notify key Emergency Management Team members.
- Disseminate information with the assistance of the Public Information Officer, on emergency leadership positions.
- Designate specific responsibilities to the Emergency Management Team Members
    - Incident Commander
    - Information and Planning
    - Financial and Logistics
    - Communication/Public Information
    - Site and Worker Safety
- Establish an incident action plan in conjunction with the Emergency Management Team members
- Decide on policies regarding issues of concern, which could include:
    - Resources needed from outside the company
    - Financial and legal issues

- Policy interpretation
- Media interaction
- Political and social concern
- Requesting Critical Incident Stress Intervention Response Team (through Human Resources Director) to assist with the emotional support of staff and families affected by the incident.

- Initiate the Recovery Phase of the incident
- Keep an accounting of the actions, communications and directives throughout the incident
- Order a post-incident critique.

Incident Commander (IC)

The IC is responsible for front-line management of the incident, tactical planning and execution, assisting (in conjunction with the FEMC) in determining whether outside assistance is needed, and relaying requests for internal resources or outside assistance through the EOC. The IC will be selected by the FEMC from trained management personnel within the Environmental, Health and Safety or Engineering, Utilities, and Maintenance Departments. Following are guidelines for the IC:

- Assume command at the scene of the incident.
- Implement the emergency management plan.
- Ensure effective coordination with the facility EOC.
- Determine the response strategies.
- Determine need for and activate resources.
- Oversee all on-scene incident response activities.
- If outside response organizations are involved, follow the direction of the community IC and provide a complete report on the situation.
- Keep track of which organizations are on-site and how the response is being coordinated.
- Declare that the incident is "over."

Information and Planning Coordinator

- Coordinate with Finance and Logistics Coordinator to ensure that all core business functions are maintained and can be readily addressed in preparation for emergencies or disasters.
- Coordinate with Communications/Infrastructure Coordinator and Security Coordinator to ensure that records on all critical systems and resources are kept current and readily available.
- Assist with deployment to alternate location to relocate business operations during emergencies/disasters.
- Ensure that adequate resources are available at alternate location.
- Assess the impact that temporary and permanent loss of facilities has on business operations.
- Conduct a survey of affected or needed company records/electronic resources
- Assist with coordination of Emergency Management Team in gathering resources for emergency management.
- Keep an accounting of the actions, communications and directives throughout the incident.
- Coordinate the emergency operation plans for the incident with other work units and other applicable emergency plans.
- Coordinate information for the Emergency Management Team.
- Take minutes of briefings/meetings and disseminate team information.

- Set up graphics board or equivalent for team briefings.
- Arrange follow-up meeting locations and notify team members regarding briefings.
- Maintain a daily log of team activities.
- Keep complete documentation of the event in progress.

Finance and Logistics Coordinator

- Activate essential teams to respond to the incident to fill the following functions (as needed)
  - Mitigation and damage control of physical property
  - Human resource management
  - Financial management and emergency purchasing
  - Vital record and holdings protection
  - Clerical and administrative staff to assist in the Emergency Operations Center
  - Needs assessment and delivery coordination of outside resources
  - Outside responder needs
  - Documentation of the event in progress
  - Recovery planning

- Keep an accounting of the actions, communications, and directives throughout the incident.
- Maintain Core Business Functions chart and use the chart during emergencies to ensure that all functions are addressed (coordinate with Information and Planning Director).
- Maintain Critical Vendor and Customer lists and ensure that they are contacted during emergencies to inform them of the company's status.
- Assist in garnering external financial and human resources, i.e., donations of time, money or talent, as may be needed.
- Maintain work unit staffing throughout the duration, possibly bringing in contract professionals, as necessary, to manage the situation.
- Monitor the situation for potential loss issues
- Assist in decisions regarding:
  - Resources from outside the company
  - Food, water, shelter for employees
  - Financial and legal issues
  - Policy interpretation
  - Political and social concerns
  - Survey of company records
  - Incident records, including photographs when feasible

Employee and Site Safety Coordinator

- Coordinate employee issues, such as office relocations and office closure, with the Public Information Officer and the Human Resources Director.
- Develop a coordinated plan of response with the Emergency Management Team
  - Implement evacuation and relocating employee procedures or shelter-in-place procedures if required
  - Coordinate with Communications Coordinator to establish an emergency telephone information center to handle calls to and from families.

- Determine the staffing of the team needed to respond to the situation. Critical areas include:

  - Medical attention and counseling
  - Short and/or long-term Shelter
  - Food and drinking water
  - Toilet facilities

- Monitor the effect of the incident on employees and recommend a response.
- Assign and train floor marshals to assist with building evacuations.
- Communicate with family members if an employee is affected. Comfort the family and attend to the family's needs.
- Request a Critical Incident Stress Intervention Response Team through the Human Resources Director, if necessary.
- Assist in establishing an incident action plan in conjunction with the Emergency Management Team members.
- Provide incident command and Emergency Management Team information on potential hazards within buildings.
- Assist in the calculation of assumed risk for those areas.
- Provide information on exposure, remedy, and clean up of potentially impacted areas.
- Coordinate with the FEMC to ensure local, state, and federal regulations are followed in reporting releases of hazardous materials during and following the incident to proper authorities.
- Provide for proper disposal of impacted hazardous materials following the incident.
- Separate hazardous and non-hazardous debris during damage assessment.
- If appropriate, join community emergency operations center or command post.
- Control hazardous substances.
- Assist in the facility survey.
- Assess and monitor hazardous or unsafe situations.
- Review and implement safety measures for emergency responders.
- Identify hazardous situations associated with the incident and prevent unsafe actions.
- Meet with insurers regarding employee and property concerns, if necessary.
- Keep an accounting of the actions, communications, and directives throughout the incident.

Communications and Infrastructure Coordinator

- Develop a coordinated plan of response with the Emergency Management Team
- Maintain the Critical Systems and Resources chart to ensure accurate accounting of systems and resources and have that information readily available in preparation for emergencies or disasters. Coordinate with Information and Planning and Security Coordinators.
- Establish and maintain internal and external communications during the state of emergency.
- Establish an emergency telephone information center to handle calls to and from families, neighboring businesses, and customers.
- Coordinate closely with Public Information Officer for media inquiries.
- Assess the impact that temporary and permanent loss of facilities has on business operations.
- Keep an accounting of the actions, communications, and directives throughout the incident.
- Establish alternative communication needs for and with employees
- Identify everyday functions performed by facility and communications, both voice and data used to support them.
- Consider business impact if communications were inoperable and how this could affect emergency operations.
- Prioritize all facility communications to determine which should be restored first in an emergency.

- Coordinate emergency procedures with XTEL Communications.
- Determine and implement backup communications for each business function.
- Ensure that alternate facility location is equipped with adequate primary and backup communications.
- Ensure that warning system is tested regularly (both audio and visual) and that an auxiliary power supply is in place and functional.
- Establish procedures for restoring communications systems.
- Test all communications systems once monthly at a minimum.
- Establish and maintain SOPs for all communications functions.
- Ensure that all Emergency Management Team members are fully trained on all communications SOPs.

Public Information Officer

- Establish communications with the Incident Commander and FEMC.
- Draft a company public relations plan. Coordinate the plan with the Emergency Management Team.
- Prepare public statements in conjunction with the Emergency Management Team.
- Provide FEMC or designee to answer media inquiries.
- Notify staff to prepare for incoming inquiries.
- Monitor and record media personnel on site.
- Ensure that media personnel are located separate from emergency operations.
- Arrange briefings for the Emergency Management Team.
- Plan new conferences on briefings (as needed).
- Prepare responders / spokespeople.
- Coordinate closely with the Information and Planning Coordinator to capture the most up to date incident information.
- Establish electronic or alternative communication methods, as needed/
- Photograph the scene, if it's safe to do so.
- Initiate rumor control.

Security Coordinator

- Coordinate with Communications/Infrastructure and Information and Planning Coordinators to ensure accurate and current records are maintained on critical systems and resources.
- Initiate appropriate response protocols for the type of emergency and, if needed:

  - Furnish and direct staff and equipment to set up barricades
  - Maintain security in the affected area;
  - Support offsite evacuation efforts;
  - Establish traffic flow routes and assisting with traffic control;
  - Request search and rescue operations;
  - Secure evidence by blocking off areas where it may exist
  - Maintain crowd control; and
  - Direct large-scale on-site evacuations.
  - Request backup personnel
  - Identify and coordinate emergency services including the need for outside assistance. Relinquish security responsibilities to appropriate responders and serve as company site liaison to the incident.

Resources

Emergency Operations Center

To effectively manage the incident, the FEMC will establish an EOC, which will be located in the company training center, which is located on the southwest end of company property (near intersection of Main and Elm Streets). The EOC will be set up in the lower level (Room LL111) of the training center. The FEMC and Emergency Management Team coordinators will work from the EOC to coordinate response operations during emergencies. In the event that the company training center is threatened or impacted by the incident, an alternate EOC will be set up at the company warehouse (security office) located at 800 Industrial Boulevard. Each Emergency Management Team coordinator is responsible for ensuring that up to date SOPs (including staff call down lists) and hazard-specific emergency plans are housed in the primary and alternate EOC locations so that they are readily available during emergencies. The Finance and Logistics Coordinator is responsible for ensuring that all other required supplies and resources are available at both locations and can be set up in "turn-key" fashion.

Both the primary and secondary EOC are equipped with the following resources:

- Communications equipment (telephones, computers, radios).
- Backup power, communications and lighting.
- Telephone directories.
- Status boards, site maps, blueprints.
- Technical information and data for advising responders.
- Activity logs and office supplies.
- SOPs and hazard specific emergency plans (as referenced above).
- Site safety and building security information.
- Emergency supplies.

Communications

Employees, employees' families, local response agencies, neighboring businesses, and the community will be notified of site emergencies using communication tools available during the emergency. They may include:

- Landline telephone
- Cellular telephone
- Two-way radio
- Intercom system (internal employees located within building)
- E-mail
- Facsimile
- Web page updates
- Electronic sign messages
- Television and radio broadcast
- Personal interaction/messengers
- Building fire-alarm audio systems

Landline telephone is the primary means of communication used between the EOC and off-site individuals/organizations. In the event that regular telephone communications are damaged, cellular telephones or two-way radio will be used to communicate with outside response organizations. Communication between the facility EOC and the facility IC will be conducted primarily via cellular phone and/or two-way radio. An emergency telephone information center to handle outgoing and incoming calls

Appendix A: Sample Emergency Management Plan
Acme Industries Emergency Management Plan

from employees and their families, neighboring businesses, private citizens, and business customers will be set up and maintained in the employee lounge adjacent to the EOC. The Communications and Infrastructure Coordinator of the Emergency Management Team is responsible for implementing all communications tasks and procedures as detailed under the "Roles and Responsibilities" section of this document.

Notification

Procedures for making emergency notifications have been posted in all public gathering areas throughout the site and next to all public telephones. All employees should be familiar with these procedures to report emergencies and follow them as identified below:

Reporting Emergencies

An individual witnessing an emergency shall:

- Dial extension 0911 to report any fire, rescue, life threatening or medical emergencies to the 24-hour on site security station. Be prepared to provide the following:
  - Your name
  - Type of emergency
  - Exact location of emergency
  - Telephone extension number from which you are calling
  - Hang up the telephone

NOTE: Ensure your own personal safety prior to implementing the above procedure.

In the event of a fire, chemical release, or other hazard with potential exposure to the general employee population, activation of the fire alarm system will initiate the evacuation alarm.

Notification to government agencies to comply with local, state, and federal regulations will be coordinated by the FEMC. The FEMC may delegate the notification responsibilities to the following: Alternate FEMC, Communications, and Infrastructure Coordinator, Director of Engineering and Maintenance or Environmental, Safety, and Health senior personnel. SOPs for notifying government agencies must be followed in making the appropriate notifications.

Warning System

If the audible/visual alarm system is activated, employees should evacuate immediately according to company evacuation procedures (Annex A). The Employee and Site Safety Coordinator will ensure that the warning system is tested on a monthly basis and that all employees are completely familiar with evacuation procedures.

Protecting Employees

Evacuation Planning

Evacuation may be required immediately in situations such as fires, hazardous materials incidents, or bomb threats or in coordination with community emergency response efforts for hurricanes or approaching winter storms. The FEMC has overall authority to order an evacuation of the building; however, in the event that an employee witnesses an emergency such as a fire or hazardous material spill, that he or she deems as immediately life threatening, that individual can activate the alarm system by triggering the fire alarm at one

of the locations throughout the building. In addition to the FEMC, the Employee and Site Safety Coordinator and Director of Administration have authority to order evacuations.

Floor marshals and alternate floor marshals, appointed by the Employee/Site Safety Coordinator, are assigned to each individual business unit throughout the building (names and photographs are posted on business unit bulletin boards) and have the following responsibilities during an evacuation:

- Assist individuals with disabilities.
- Assist individuals who are not familiar with evacuation procedures (e.g., customers, vendors, visitors).
- Ensure that the entire area has been evacuated.
- Shut down critical operations in area.
- Evacuate themselves.
- Ensure that all employees have assembled in pre-designated area outside the building and that all are accounted by conducting head count. If individual(s) cannot be accounted for, notify the FEMC immediately of individual(s) name and last known location.
- For off-site evacuations where employees and non-employees are sent home or to shelters, ensure that all are provided with transportation.
- Provide findings to the Employee/Site Safety Coordinator or the FEMC.

The Employee/Site Safety Coordinator through coordination with the FEMC, shall ensure that all evacuation plans are coordinated with the DCEMA and that all employees are familiar with evacuation procedures by ensuring that they are prominently displayed in common areas throughout the site and by providing regular training and exercises.

Sheltering

Depending upon the type of incident, the FEMC and Emergency Management Team may determine that sheltering inside the building is the most appropriate protective action. In the event that sheltering-in-place is required, employees will be notified via the intercom system and e-mail and directed to follow required procedures and report to their designated shelter areas within the building. As a backup means of notification, the Emergency Management team and floor marshals will personally notify each area of the building of the shelter-in-place order.

The FEMC and Employee/Site Safety Coordinator should ensure that emergency supplies including food, water and medical supplies, are in place at each of the designated sheltering areas inside the building. In addition, they should ensure that sheltering procedures have been coordinated with local response agencies, including the DCEMA.

Post Incident Critique

The FEMC shall initiate a post-incident critique as soon as practical following any emergency incident requiring activation of this plan. The purpose of the critique is to identify and define any problems that may have been encountered during the response, seek alternatives, disclose ways to prevent future incidents and improve the Emergency Management Plan.

Recovery

Once the emergency phase of the incident has concluded, the next priority will be to re-establish normal operating conditions. The Director of Administration will appoint a Recovery Team that will guide the company back to normal operations. The composition of the Team will be determined by the nature and magnitude of the emergency and the impact it has had upon ACME Industries.

Appendix A: Sample Emergency Management Plan
Acme Industries Emergency Management Plan

All departments and programs that have been impacted will be asked to make an immediate assessment of staffing, materials and equipment that are necessary to restore interim and/or long-term functions. Departments that have prepared Recovery Plans, should use these plans as guidance in restoring their functions to normal operations.

Included in the recovery phase will be the cost to recover from the incident. Affected departments will be asked to prepare internal cost and loss documentation reports and to submit them to the Recovery Team. Insurance materials or guidance documents from external funding sources or other agencies, will be distributed as needed.

Critical Incident Stress Management

The stress caused by an emergency can affect an individual long after the event has concluded. The Company will make physical and mental health services available to individuals by using the services of the Employee Assistance Program, worker's compensation or their Company health plan. Additionally, the services of other professionals that have been trained in critical incident stress intervention may be requested.

Damage Assessment Overview

Once the emergency phase of the response has concluded, damage assessment is needed to provide documentation such as:

- Insurance claims,
- Evaluation of facilities for safety and suitability of re-occupancy, and
- Investigation of the cause and contributing factors that lead to the incident.

Damage assessment should begin prior to the removal of any debris or the initialization of the recovery phase, and should be well documented.

Plan De-Activation

When emergency conditions are stabilized and the Company has resumed normal operations, the Emergency Plan will be de-activated by the FEMC. A formal announcement will be disseminated via e-mail.

If the nature of the incident requires an extension of some emergency services, special work groups may be appointed to coordinate those continuing activities. These groups may need to consider:

- Office or equipment space re-allocations
- Business relief assistance

Annex A

Annex A: Emergency Procedures

Fire

Fire Reporting: Dial 911
Provide The Fire Location (Building, Room & Street)

ALL individuals are required to evacuate any time the alarm is activated. The Safety Office coordinates building fire drills at least twice per year. Building occupants will be notified before a drill occurs.

- ❑ In the event of a fire, pull the alarm nearest you.
- ❑ Report the fire to 911 from a safe location.
- ❑ Follow your work area's procedures for emergency shut down of dangerous equipment or protection of cash, providing it is safe to do so and does not delay your evacuation.

Immediately evacuate through the nearest safe exit when the fire alarm sounds.

- ❑ Check the exit route before leaving the room. Exit only if it is safe to do so.
- ❑ Close the door behind you, but do not lock the door. Do not waste time closing windows or shutting off computers.
- ❑ If there is smoke, stay close to the floor.
- ❑ If it is not safe to exit the room, remain calm and close the door.
  - Attract attention to yourself by waving a bright colored object in the window, making noise or calling 911.
  - Fill cracks around the doors with damp towels or fabric to keep smoke out.
- ❑ "Walk - Don't Run. " Remain calm and quiet so you can hear directions or announcements.
- ❑ Individuals who cannot negotiate the stairs should go to the designated safe zone on the floor.
- ❑ Offer assistance to individuals with disabilities.
  - Close (do not lock) the door to the safe room.
  - Report their location to FEMC or Fire Department officials.
- ❑ USE THE STAIRS TO EVACUATE--DO NOT USE THE ELEVATOR.
- ❑ Follow the posted evacuation routes to a meeting area at least 300 feet from the building.
  - Check rooms along the evacuation route for occupants, if it is safe to do so.
  - Attempt to keep the evacuated people together.
  - Inquire of the evacuated persons to determine if anyone is injured. Report injuries to FEMC to arrange for treatment.
  - Inquire of the evacuated persons if others may still be within the building and their location.
  - Provide information on the fire location, individuals still within the building and possible hazardous conditions to either FEMC or the Fire Chief.
  - If possible, compile a list of people evacuated in your group and provide it to the FEMC or his/her representative at the scene.

Save lives by evacuating the building rather than fighting the fire.
DO NOT re-enter the building until the "ALL CLEAR" is given by IC or Fire Department Officials.

Severe Weather

Severe Weather includes strong winds, tornados, damaging hail.

Watches indicate that weather conditions are favorable for a storm or tornado.

Appendix A: Sample Emergency Management Plan
Acme Industries Emergency Management Plan

Warnings indicate a storm or tornado is imminent. Take Cover.

Severe weather warnings will be received from emergency broadcast radio or television announcements.

All occupants should seek shelter away from windows on the lowest floor in an interior room, enclosed stairwell or hallway, as directed by FEMC or designee.

- ❑ DO NOT USE THE ELEVATOR.
- ❑ Take coats, jackets, and shoes that are in the immediate vicinity for protection from broken glass and flying debris.
- ❑ Direct individuals who cannot negotiate the stairs to a safe shelter on the same floor.
- ❑ Do not seek shelter in gymnasiums or large rooms.
- ❑ Stay inside, away from all doors, windows, outside walls, and skylights.
- ❑ Sit against the wall or beneath sturdy tables if possible.
- ❑ Offer assistance to individuals with disabilities
- ❑ When necessary, cover your head and face with available protective objects.
- ❑ Remain calm and quiet so that verbal directions can be heard.
- ❑ Direct occupants to a safe shelter within the building that is away from windows.
- ❑ Check for individuals who may be in need of assistance, if it is safe to do so.
- ❑ Direct the injured and people with disabilities to a safe area.
- ❑ Locate available supplies for first aid, battery-operated radios and flashlights.
- ❑ Tune radios to a local station for severe weather reports. Keep phone lines available for emergency communications.
- ❑ Determine if the building communication systems are operable or if alternative communication systems are available.
- ❑ Report injuries to FEMC or Employee and Site Safety Coordinator immediately.

Do not leave the building until the storm has passed.

- ❑ The all clear will be signaled by the National Weather Service and relayed by the FEMC to the buildings via intercom system or other available means.
- ❑ When exiting the building, beware of downed power lines, broken glass, and unsafe areas.

Bomb Threats

Report Bomb Threats and Suspicious Mail, Packages, or Objects to 9-1-1

- ❑ If a report of a bomb threat is received, remain calm.
- ❑ Attempt to get information from the caller about the bomb, including the type of device, a description, its location and when it is set to go off. Make a record of the information.
- ❑ If a written bomb threat is received, save all materials (envelopes, packing, etc) and handle the material as little as possible.
- ❑ Immediately report the threat and information to the Police Department ,
- ❑ Individuals should NOT activate the fire alarm.
- ❑ Evacuate the building completely and go to the meeting locations indicated on the posted evacuation routes.

If a suspicious object/package/mail is received or found:

- ❑ Do not touch, open, or move the object.
- ❑ Report the location and a description immediately to the Police, 911.

- ❑ Follow the directives of law enforcement representatives if on scene. If law enforcement is not on scene, follow directives of FEMC and Security Coordinator.

Note: Mail bombs are extremely rare. Suspect packages or envelopes may have excessive postage, a fictitious return address, a postmark that is different from the return address, protruding wires, aluminum foil, oil stains, or a peculiar odor. Be suspicious of mail addressed as "Personal" or "Private" to a person who does not receive personal mail at work; rigid, uneven or lopsided letters; packages with irregular shapes, soft spots or bulges; or unprofessionally wrapped packages that may be marked "Fragile-Handle with Care" or "Rush-Do Not Delay".

Evacuate immediately

- ❑ USE THE STAIRS -- DO NOT USE THE ELEVATOR.
- ❑ Take only your personal belongings that are in the immediate vicinity.
- ❑ Remain calm and quiet so that verbal directions can be heard.
- ❑ Direct individuals who cannot negotiate the stairs to a safe shelter on the same floor.
- ❑ Offer assistance to individuals with disabilities.
- ❑ Follow the directives of the authorities on the scene.
- ❑ Check rooms for occupants along the evacuation route. Close, but do not lock doors.
- ❑ Keep the evacuated persons grouped together at the locations indicated on the posted evacuation routes.
- ❑ Provide information on persons thought to be within the building, suspicious packages, objects, or individuals to Security immediately.

Do Not re-enter the building until the "All Clear" is given by authorities on scene.

Appendix A: Sample Emergency Management Plan
Acme Industries Emergency Management Plan

Annex B:
Continuity Records

Business

TABLE 1

Core Business Functions				
Service Description	Recipients	Maximum Allowable Disruption (Days)	Criticality	Point of Contact
Reimburse Vendors				
Maintain Database				
Process invoices				
Issue checks				
General Operations				
Maintenance Support				
Hot-line				
Help desk				

TABLE 2

Critical Systems/Resources					
Critical System	Business Function	Primary Location	Secondary Location		
Facilities					
Communication					
Security					
Network System Other Resources					

TABLE 3

Critical Vendor List		
Vendor Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Comments:		

TABLE 4

Key Customer List		
Customer Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Comments:		

Appendix A: Sample Emergency Management Plan
Acme Industries Emergency Management Plan

TABLE 5

Business Partners/Support Providers List		
Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Comments:		

TABLE 6

Secondary Location Profile		
Facility Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Security Considerations:		

Emergency Management Guide for Business and Industry

A Step-by-Step Approach to Emergency Planning, Response and Recovery for Companies of All Sizes

FEMA 141/October 1993

FEMA

EMERGENCY MANAGEMENT GUIDE FOR

BUSINESS & INDUSTRY

A STEP-BY-STEP APPROACH TO EMERGENCY PLANNING, RESPONSE AND RECOVERY FOR COMPANIES OF ALL SIZES

Sponsored by a Public-Private Partnership with the Federal Emergency Management Agency

Special thanks to the following organizations for supporting the development, promotion and distribution of the Emergency Management Guide for Business & Industry:

American Red Cross

American Insurance Association

Building Owners and Managers Association International

Chemical Manufacturers Association

Fertilizer Institute

National Association of Manufacturers

National Commercial Builders Council
of the National Association of Home Builders

National Coordinating Council on Emergency Management

National Emergency Management Association

National Industrial Council — State Associations Group

New Jersey Business & Industry Association

Pacific Bell

Pennsylvania Emergency Management Agency

The Emergency Management Guide for Business & Industry was produced by the Federal Emergency Management Agency (FEMA) and supported by a number of private companies and associations representing business and industry.

The approaches described in this guide are recommendations, not regulations. There are no reporting requirements, nor will following these principles ensure compliance with any Federal, State or local codes or regulations that may apply to your facility.

FEMA is not a regulatory agency. Specific regulatory issues should be addressed with the appropriate agencies such as the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA).

Prepared under FEMA Contract EMW-90-C-3348 by:

Thomas Wahle
Ogilvy Adams & Rinehart
Washington, D.C.
(202) 452-9419

Gregg Beatty
Roy F. Weston, Inc.
Rockville, Maryland
(301) 646-6855

TABLE OF CONTENTS

INTRODUCTION. A hurricane blasts through South Florida causing more than $25 billion in damages.

A fire at a food processing plant results in 25 deaths, a company out of business and a small town devastated.

A bombing in the World Trade Center results in six deaths, hundreds of injuries and the evacuation of 40,000 people.

A blizzard shuts down much of the East Coast for days. More than 150 lives are lost and millions of dollars in damages incurred.

Every year emergencies take their toll on business and industry — in lives and dollars. But something can be done. Business and industry can limit injuries and damages and return more quickly to normal operations if they plan ahead.

About This Guide

This guide provides step-by-step advice on how to create and maintain a comprehensive emergency management program. It can be used by manufacturers, corporate offices, retailers, utilities or any organization where a sizable number of people work or gather.

Whether you operate from a high-rise building or an industrial complex; whether you own, rent or lease your property; whether you are a large or small company; the concepts in this guide will apply.

To begin, you need not have in-depth knowledge of emergency management. What you need is the authority to create a plan and a commitment from the chief executive officer to make emergency management part of your corporate culture.

If you already have a plan, use this guide as a resource to assess and update your plan.

The guide is organized as follows:

Section 1: 4 Steps in the Planning Process — how to form a planning team; how to conduct a vulnerability analysis; how to develop a plan; and how to implement the plan. The information can be applied to virtually any type of business or industry.

Section 2: Emergency Management Considerations — how to build such emergency management capabilities as life safety, property protection, communications and community outreach.

Section 3: Hazard-Specific Information — technical information about specific hazards your facility may face.

Section 4: Information Sources — where to turn for additional information.

What Is an Emergency?

An emergency is any unplanned event that can cause deaths or significant injuries to employees, customers or the public; or that can shut down your business, disrupt operations, cause physical or environmental damage, or threaten the facility's financial standing or public image.

Obviously, numerous events can be "emergencies," including:

- Fire
- Hazardous materials incident
- Flood or flash flood
- Hurricane
- Tornado
- Winter storm
- Earthquake
- Communications failure
- Radiological accident
- Civil disturbance
- Loss of key supplier or customer
- Explosion

The term "disaster" has been left out of this document because it lends itself to a preconceived notion of a large-scale event, usually a "natural disaster." In fact, each event must be addressed within the context of the impact it has on the company and the community. What might constitute a nuisance to a large industrial facility could be a "disaster" to a small business.

What Is Emergency Management?

Emergency management is the process of preparing for, mitigating, responding to and recovering from an emergency.

Emergency management is a dynamic process. Planning, though critical, is not the only component. Training, conducting drills, testing equipment and coordinating activities with the community are other important functions.

Making the "Case" for Emergency Management

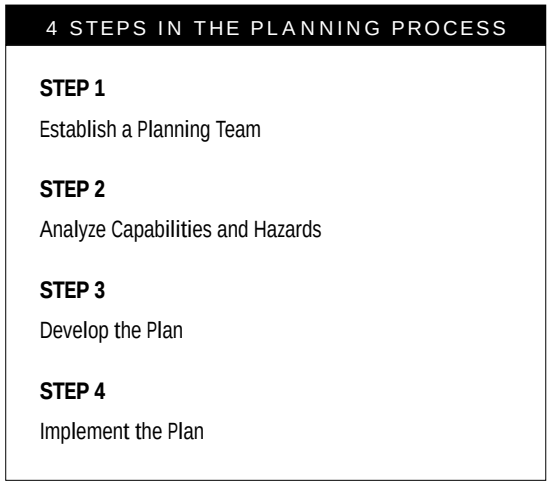
To be successful, emergency management requires upper management support. The chief executive sets the tone by authorizing planning to take place and directing senior management to get involved.

When presenting the "case" for emergency management, avoid dwelling on the negative effects of an emergency (e.g., deaths, fines, criminal prosecution) and emphasize the positive aspects of preparedness. For example:

- It helps companies fulfill their moral responsibility to protect employees, the community and the environment.
- It facilitates compliance with regulatory requirements of Federal, State and local agencies.
- It enhances a company's ability to recover from financial losses, regulatory fines, loss of market share, damages to equipment or products or business interruption.
- It reduces exposure to civil or criminal liability in the event of an incident.
- It enhances a company's image and credibility with employees, customers, suppliers and the community.
- It may reduce your insurance premiums.

SECTION

1



ESTABLISH A PLANNING TEAM. There must be an individual or group in charge of developing the emergency management plan. The following is guidance for making the appointment.

STEP 1

ESTABLISH A PLANNING TEAM

Form the Team

The size of the planning team will depend on the facility's operations, requirements and resources. Usually involving a group of people is best because:

- It encourages participation and gets more people invested in the process.
- It increases the amount of time and energy participants are able to give.
- It enhances the visibility and stature of the planning process.
- It provides for a broad perspective on the issues.

Determine who can be an active member and who can serve in an advisory capacity. In most cases, one or two people will be doing the bulk of the work. At the very least, you should obtain input from all functional areas. Remember:

- Upper management
- Line management
- Labor
- Human Resources
- Engineering and maintenance
- Safety, health and environmental affairs
- Public information officer
- Security
- Community relations
- Sales and marketing
- Legal
- Finance and purchasing

Have participants appointed in writing by upper management.

Their job descriptions could also reflect this assignment.

Here's one example of a planning team.

Establish Authority

Demonstrate management's commitment and promote an atmosphere of cooperation by "authorizing" the planning group to take the steps necessary to develop a plan. The group should be led by the chief executive or the plant manager.

Establish a clear line of authority between group members and the group leader, though not so rigid as to prevent the free flow of ideas.

Issue a Mission Statement

Have the chief executive or plant manager issue a mission statement to demonstrate the company's commitment to emergency management. The statement should:

- Define the purpose of the plan and indicate that it will involve the entire organization
- Define the authority and structure of the planning group

Establish a Schedule and Budget

Establish a work schedule and planning deadlines. Timelines can be modified as priorities become more clearly defined.

Develop an initial budget for such things as research, printing, seminars, consulting services and other expenses that may be necessary during the development process.

ANALYZE CAPABILITIES AND HAZARDS. This step entails gathering information about current capabilities and about possible hazards and emergencies, and then conducting a vulnerability analysis to determine the facility's capabilities for handling emergencies.

STEP 2

ANALYZE CAPABILITIES AND HAZARDS

WHERE DO YOU STAND RIGHT NOW?

Review Internal Plans and Policies

Documents to look for include:

- Evacuation plan
- Fire protection plan
- Safety and health program
- Environmental policies
- Security procedures
- Insurance programs
- Finance and purchasing procedures
- Plant closing policy
- Employee manuals
- Hazardous materials plan
- Process safety assessment
- Risk management plan
- Capital improvement program
- Mutual aid agreements

Meet with Outside Groups

Meet with government agencies, community organizations and utilities. Ask about potential emergencies and about plans and available resources for responding to them. Sources of information include:

- Community emergency management office
- Mayor or Community Administrator's office
- Local Emergency Planning Committee (LEPC)
- Fire Department
- Police Department
- Emergency Medical Services organizations
- American Red Cross
- National Weather Service
- Public Works Department
- Planning Commission
- Telephone companies
- Electric utilities
- Neighboring businesses

While researching potential emergencies, one facility discovered that a dam — 50 miles away — posed a threat to its community. The facility was able to plan accordingly.

One way to increase response capabilities is to identify employee skills (medical, engineering, communications, foreign language) that might be needed in an emergency.

Identify Codes and Regulations

Identify applicable Federal, State and local regulations such as:

- Occupational safety and health regulations
- Environmental regulations
- Fire codes
- Seismic safety codes
- Transportation regulations
- Zoning regulations
- Corporate policies

Identify Critical Products, Services and Operations

You'll need this information to assess the impact of potential emergencies and to determine the need for backup systems. Areas to review include:

- Company products and services and the facilities and equipment needed to produce them
- Products and services provided by suppliers, especially sole source vendors
- Lifeline services such as electrical power, water, sewer, gas, telecommunications and transportation
- Operations, equipment and personnel vital to the continued functioning of the facility

Identify Internal Resources and Capabilities

Resources and capabilities that could be needed in an emergency include:

- Personnel — fire brigade, hazardous materials response team, emergency medical services, security, emergency management group, evacuation team, public information officer
- Equipment — fire protection and suppression equipment, communications equipment, first aid supplies, emergency supplies, warning systems, emergency power equipment, decontamination equipment
- Facilities — emergency operating center, media briefing area, shelter areas, first-aid stations, sanitation facilities
- Organizational capabilities — training, evacuation plan, employee support system
- Backup systems — arrangements with other facilities to provide for:
  - Payroll
  - Communications
  - Production
  - Customer services
  - Shipping and receiving
  - Information systems support
  - Emergency power
  - Recovery support

Identify External Resources

There are many external resources that could be needed in an emergency. In some cases, formal agreements may be necessary to define the facility's relationship with the following:

- Local emergency management office
- Fire Department
- Hazardous materials response organization
- Emergency medical services
- Hospitals
- Local and State police
- Community service organizations
- Utilities
- Contractors
- Suppliers of emergency equipment
- Insurance carriers

Do an Insurance Review

Meet with insurance carriers to review all policies. (See Section 2: Recovery and Restoration.)

CONDUCT A VULNERABILITY ANALYSIS

The next step is to assess the vulnerability of your facility — the probability and potential impact of each emergency. Use the Vulnerability Analysis Chart in the appendix section to guide the process, which entails assigning probabilities, estimating impact and assessing resources, using a numerical system. The lower the score the better.

List Potential Emergencies

In the first column of the chart, list all emergencies that could affect your facility, including those identified by your local emergency management office. Consider both:

- Emergencies that could occur within your facility
- Emergencies that could occur in your community

Below are some other factors to consider.

- **Historical** — What types of emergencies have occurred in the community, at this facility and at other facilities in the area?
  - Fires
  - Severe weather
  - Hazardous material spills
  - Transportation accidents
  - Earthquakes
  - Hurricanes
  - Tornadoes
  - Terrorism
  - Utility outages
- **Geographic** — What can happen as a result of the facility's location? Keep in mind:
  - Proximity to flood plains, seismic faults and dams
  - Proximity to companies that produce, store, use or transport hazardous materials
  - Proximity to major transportation routes and airports
  - Proximity to nuclear power plants
- **Technological** — What could result from a process or system failure? Possibilities include:
  - Fire, explosion, hazardous materials incident
  - Safety system failure
  - Telecommunications failure
  - Computer system failure
  - Power failure
  - Heating/cooling system failure
  - Emergency notification system failure
- **Human Error** — What emergencies can be caused by employee error? Are employees trained to work safely? Do they know what to do in an emergency?

  Human error is the single largest cause of workplace emergencies and can result from:
  - Poor training
  - Poor maintenance
  - Carelessness
  - Misconduct
  - Substance abuse
  - Fatigue

- **Physical** — What types of emergencies could result from the design or construction of the facility? Does the physical facility enhance safety? Consider:
  - The physical construction of the facility
  - Hazardous processes or byproducts
  - Facilities for storing combustibles
  - Layout of equipment
  - Lighting
  - Evacuation routes and exits
  - Proximity of shelter areas
- **Regulatory** — What emergencies or hazards are you regulated to deal with?

Analyze each potential emergency from beginning to end. Consider what could happen as a result of:

- Prohibited access to the facility
- Loss of electric power
- Communication lines down
- Ruptured gas mains
- Water damage
- Smoke damage
- Structural damage
- Air or water contamination
- Explosion
- Building collapse
- Trapped persons
- Chemical release

Estimate Probability

In the Probability column, rate the likelihood of each emergency's occurrence. This is a subjective consideration, but useful nonetheless.

Use a simple scale of 1 to 5 with 1 as the lowest probability and 5 as the highest.

Assess the Potential Human Impact

Analyze the potential human impact of each emergency — the possibility of death or injury.

Assign a rating in the Human Impact column of the Vulnerability Analysis Chart. Use a 1 to 5 scale with 1 as the lowest impact and 5 as the highest.

Assess the Potential Property Impact

Consider the potential property for losses and damages. Again, assign a rating in the Property Impact column, 1 being the lowest impact and 5 being the highest. Consider:

- Cost to replace
- Cost to set up temporary replacement
- Cost to repair

A bank's vulnerability analysis concluded that a "small" fire could be as catastrophic to the business as a computer system failure. The planning group discovered that bank employees did not know how to use fire extinguishers, and that the bank lacked any kind of evacuation or emergency response system.

TYPE OF EMERGENCY	Probability	Human Impact	Property Impact	Business Impact	Internal Resources	External Resources	Total
	High 5 ↔ 1 Low	High Impact 5 ↔ 1 Low Impact			Weak Resources 5 ↔ 1 Strong Resources		

A full-page chart is located in the Appendix

When assessing resources, remember that community emergency workers — police, paramedics, firefighters — will focus their response where the need is greatest. Or they may be victims themselves and be unable to respond immediately. That means response to your facility may be delayed.

Assess the Potential Business Impact

Consider the potential loss of market share. Assign a rating in the Business Impact column. Again, 1 is the lowest impact and 5 is the highest. Assess the impact of:

- Business interruption
- Employees unable to report to work
- Customers unable to reach facility
- Company in violation of contractual agreements
- Imposition of fines and penalties or legal costs
- Interruption of critical supplies
- Interruption of product distribution

Assess Internal and External Resources

Next assess your resources and ability to respond. Assign a score to your Internal Resources and External Resources. The lower the score the better.

To help you do this, consider each potential emergency from beginning to end and each resource that would be needed to respond. For each emergency ask these questions:

- Do we have the needed resources and capabilities to respond?
- Will external resources be able to respond to us for this emergency as quickly as we may need them, or will they have other priority areas to serve?

If the answers are yes, move on to the next assessment. If the answers are no, identify what can be done to correct the problem. For example, you may need to:

- Develop additional emergency procedures
- Conduct additional training
- Acquire additional equipment
- Establish mutual aid agreements
- Establish agreements with specialized contractors

Add the Columns

Total the scores for each emergency. The lower the score the better. While this is a subjective rating, the comparisons will help determine planning and resource priorities — the subject of the pages to follow.

DEVELOP THE PLAN. You are now ready to develop an emergency management plan. This section describes how.

STEP 3

DEVELOP THE PLAN

PLAN COMPONENTS

Your plan should include the following basic components.

Executive Summary

The executive summary gives management a brief overview of:

- The purpose of the plan
- The facility's emergency management policy
- Authorities and responsibilities of key personnel
- The types of emergencies that could occur
- Where response operations will be managed

Emergency Management Elements

This section of the plan briefly describes the facility's approach to the core elements of emergency management, which are:

- Direction and control
- Communications
- Life safety
- Property protection
- Community outreach
- Recovery and restoration
- Administration and logistics

These elements, which are described in detail in Section 2, are the foundation for the emergency procedures that your facility will follow to protect personnel and equipment and resume operations.

In an emergency, all personnel should know: 1. What is my role? 2. Where should I go?

Some facilities are required to develop:

- Emergency escape procedures and routes
- Procedures for employees who perform or shut down critical operations before an evacuation
- Procedures to account for all employees, visitors and contractors after an evacuation is completed
- Rescue and medical duties for assigned employees
- Procedures for reporting emergencies
- Names of persons or departments to be contacted for information regarding the plan

Emergency Response Procedures

The procedures spell out how the facility will respond to emergencies. Whenever possible, develop them as a series of checklists that can be quickly accessed by senior management, department heads, response personnel and employees.

Determine what actions would be necessary to:

- Assess the situation
- Protect employees, customers, visitors, equipment, vital records and other assets, particularly during the first three days
- Get the business back up and running

Specific procedures might be needed for any number of situations such as bomb threats or tornadoes, and for such functions as :

- Warning employees and customers
- Communicating with personnel and community responders
- Conducting an evacuation and accounting for all persons in the facility
- Managing response activities
- Activating and operating an emergency operations center
- Fighting fires
- Shutting down operations
- Protecting vital records
- Restoring operations

Support Documents

Documents that could be needed in an emergency include:

- **Emergency call lists** — lists (wallet size if possible) of all persons on and off site who would be involved in responding to an emergency, their responsibilities and their 24-hour telephone numbers
- **Building and site maps** that indicate:
  - Utility shutoffs
  - Water hydrants
  - Water main valves
  - Water lines
  - Gas main valves
  - Gas lines
  - Electrical cutoffs
  - Electrical substations
  - Storm drains
  - Sewer lines
  - Location of each building (include name of building, street name and number)
  - Floor plans
  - Alarm and enunciators
  - Fire extinguishers
  - Fire suppression systems
  - Exits
  - Stairways
  - Designated escape routes
  - Restricted areas
  - Hazardous materials (including cleaning supplies and chemicals)
  - High-value items
- **Resource lists** — lists of major resources (equipment, supplies, services) that could be needed in an emergency; mutual aid agreements with other companies and government agencies

THE DEVELOPMENT PROCESS

The following is guidance for developing the plan.

Identify Challenges and Prioritize Activities

Determine specific goals and milestones. Make a list of tasks to be performed, by whom and when. Determine how you will address the problem areas and resource shortfalls that were identified in the vulnerability analysis.

Write the Plan

Assign each member of the planning group a section to write. Determine the most appropriate format for each section.

Establish an aggressive timeline with specific goals. Provide enough time for completion of work, but not so much as to allow assignments to linger. Establish a schedule for:

- First draft
- Review
- Second draft
- Tabletop exercise
- Final draft
- Printing
- Distribution

Establish a Training Schedule

Have one person or department responsible for developing a training schedule for your facility. For specific ideas about training, refer to Step 4.

Coordinate with Outside Organizations

Meet periodically with local government agencies and community organizations. Inform appropriate government agencies that you are creating an emergency management plan. While their official approval may not be required, they will likely have valuable insights and information to offer.

Determine State and local requirements for reporting emergencies, and incorporate them into your procedures.

Determine protocols for turning control of a response over to outside agencies. Some details that may need to be worked out are:

- Which gate or entrance will responding units use?
- Where and to whom will they report?
- How will they be identified?
- How will facility personnel communicate with outside responders?
- Who will be in charge of response activities?

Determine what kind of identification authorities will require to allow your key personnel into your facility during an emergency.

Determine the needs of disabled persons and non-English-speaking personnel. For example, a blind employee could be assigned a partner in case an evacuation is necessary.

The Americans with Disabilities Act (ADA) defines a disabled person as anyone who has a physical or mental impairment that substantially limits one or more major life activities, such as seeing, hearing, walking, breathing, performing manual tasks, learning, caring for oneself or working.

Your emergency planning priorities may be influenced by government regulation. To remain in compliance you may be required to address specific emergency management functions that might otherwise be a lower priority activity for that given year.

Consolidate emergency plans for better coordination. Stand-alone plans, such as a Spill Prevention Control and Countermeasures (SPCC) plan, fire protection plan or safety and health plan, should be incorporated into one comprehensive plan.

Maintain Contact with Other Corporate Offices

Communicate with other offices and divisions in your company to learn:

- Their emergency notification requirements
- The conditions where mutual assistance would be necessary
- How offices will support each other in an emergency
- Names, telephone numbers and pager numbers of key personnel

Incorporate this information into your procedures.

Review, Conduct Training and Revise

Distribute the first draft to group members for review. Revise as needed.

For a second review, conduct a tabletop exercise with management and personnel who have a key emergency management responsibility. In a conference room setting, describe an emergency scenario and have participants discuss their responsibilities and how they would react to the situation. Based on this discussion, identify areas of confusion and overlap, and modify the plan accordingly.

Seek Final Approval

Arrange a briefing for the chief executive officer and senior management and obtain written approval.

Distribute the Plan

Place the final plan in three-ring binders and number all copies and pages. Each individual who receives a copy should be required to sign for it and be responsible for posting subsequent changes.

Determine which sections of the plan would be appropriate to show to government agencies (some sections may refer to corporate secrets or include private listings of names, telephone numbers or radio frequencies).

Distribute the final plan to:

- Chief executive and senior managers
- Key members of the company's emergency response organization
- Company headquarters
- Community emergency response agencies (appropriate sections)

Have key personnel keep a copy of the plan in their homes.

Inform employees about the plan and training schedule.

IMPLEMENT THE PLAN. Implementation means more than simply exercising the plan during an emergency. It means acting on recommendations made during the vulnerability analysis, integrating the plan into company operations, training employees and evaluating the plan.

STEP 4

IMPLEMENT

THE

PLAN

INTEGRATE THE PLAN INTO COMPANY OPERATIONS

Emergency planning must become part of the corporate culture.

Look for opportunities to build awareness; to educate and train personnel; to test procedures; to involve all levels of management, all departments and the community in the planning process; and to make emergency management part of what personnel do on a day-to-day basis.

Test how completely the plan has been integrated by asking:

- How well does senior management support the responsibilities outlined in the plan?
- Have emergency planning concepts been fully incorporated into the facility's accounting, personnel and financial procedures?
- How can the facility's processes for evaluating employees and defining job classifications better address emergency management responsibilities?
- Are there opportunities for distributing emergency preparedness information through corporate newsletters, employee manuals or employee mailings?
- What kinds of safety posters or other visible reminders would be helpful?
- Do personnel know what they should do in an emergency?
- How can all levels of the organization be involved in evaluating and updating the plan?

CONDUCT TRAINING

Everyone who works at or visits the facility requires some form of training. This could include periodic employee discussion sessions to review procedures, technical training in equipment use for emergency responders, evacuation drills and full-scale exercises. Below are basic considerations for developing a training plan.

Planning Considerations

Assign responsibility for developing a training plan. Consider the training and information needs for employees, contractors, visitors, managers and those with an emergency response role identified in the plan.

Determine for a 12 month period:

- Who will be trained
- Who will do the training
- What training activities will be used
- When and where each session will take place
- How the session will be evaluated and documented

Use the Training Drills and Exercises Chart in the appendix section to schedule training activities or create one of your own.

Consider how to involve community responders in training activities.

Conduct reviews after each training activity. Involve both personnel and community responders in the evaluation process.

Training Activities

Training can take many forms:

- **Orientation and Education Sessions** — These are regularly scheduled discussion sessions to provide information, answer questions and identify needs and concerns.
- **Tabletop Exercise** — Members of the emergency management group meet in a conference room setting to discuss their responsibilities and how they would react to emergency scenarios. This is a cost-effective and efficient way to identify areas of overlap and confusion before conducting more demanding training activities.
- **Walk-through Drill** — The emergency management group and response teams actually perform their emergency response functions. This activity generally involves more people and is more thorough than a tabletop exercise.
- **Functional Drills** — These drills test specific functions such as medical response, emergency notifications, warning and communications procedures and equipment, though not necessarily at the same time. Personnel are asked to evaluate the systems and identify problem areas.

- **Evacuation Drill** — Personnel walk the evacuation route to a designated area where procedures for accounting for all personnel are tested. Participants are asked to make notes as they go along of what might become a hazard during an emergency, e.g., stairways cluttered with debris, smoke in the hallways. Plans are modified accordingly.
- **Full-scale Exercise** — A real-life emergency situation is simulated as closely as possible. This exercise involves company emergency response personnel, employees, management and community response organizations.

Employee Training

General training for all employees should address:

- Individual roles and responsibilities
- Information about threats, hazards and protective actions
- Notification, warning and communications procedures
- Means for locating family members in an emergency
- Emergency response procedures
- Evacuation, shelter and accountability procedures
- Location and use of common emergency equipment
- Emergency shutdown procedures

The scenarios developed during the vulnerability analysis can serve as the basis for training events.

OSHA training requirements are a minimum standard for many facilities that have a fire brigade, hazardous materials team, rescue team or emergency medical response team.

	January	February	March	April	May	June	July	August	September	October	November	December
MANAGEMENT ORIENTATION/REVIEW												
EMPLOYEE ORIENTATION/REVIEW												
CONTRACTOR ORIENTATION/REVIEW												
COMMUNITY/MEDIA ORIENTATION/REVIEW												
MANAGEMENT TABLETOP EXERCISE												
RESPONSE TEAM TABLETOP EXERCISE												
WALK-THROUGH DRILL												
FUNCTIONAL DRILLS												
EVACUATION DRILL												
FULL-SCALE EXERCISE												

A full-page chart is located in the Appendix

When siting a new location, conduct a hazard analysis of the area. Modify your plan when a new site becomes operable.

EVALUATE AND MODIFY THE PLAN

Conduct a formal audit of the entire plan at least once a year. Among the issues to consider are:

- How can you involve all levels of management in evaluating and updating the plan?
- Are the problem areas and resource shortfalls identified in the vulnerability analysis being sufficiently addressed?
- Does the plan reflect lessons learned from drills and actual events?
- Do members of the emergency management group and emergency response team understand their respective responsibilities? Have new members been trained?
- Does the plan reflect changes in the physical layout of the facility? Does it reflect new facility processes?
- Are photographs and other records of facility assets up to date?
- Is the facility attaining its training objectives?
- Have the hazards in the facility changed?
- Are the names, titles and telephone numbers in the plan current?
- Are steps being taken to incorporate emergency management into other facility processes?
- Have community agencies and organizations been briefed on the plan? Are they involved in evaluating the plan?

In addition to a yearly audit, evaluate and modify the plan at these times:

- After each training drill or exercise
- After each emergency
- When personnel or their responsibilities change
- When the layout or design of the facility changes
- When policies or procedures change

Remember to brief personnel on changes to the plan.

SECTION

2

EMERGENCY MANAGEMENT CONSIDERATIONS

This section describes the core operational considerations of emergency management. They are:

- Direction and Control
- Communications
- Life Safety
- Property Protection
- Community Outreach
- Recovery and Restoration
- Administration and Logistics

FUNCTION

DIRECTION AND CONTROL

DIRECTION AND CONTROL. Someone must be in charge in an emergency. The system for managing resources, analyzing information and making decisions in an emergency is called direction and control.

The direction and control system described below assumes a facility of sufficient size. Your facility may require a less sophisticated system, though the principles described here will still apply.

The configuration of your system will depend on many factors. Larger industries may have their own fire team, emergency medical technicians or hazardous materials team, while smaller organizations may need to rely on mutual aid agreements. They may also be able to consolidate positions or combine responsibilities. Tenants of office buildings or industrial parks may be part of an emergency management program for the entire facility.

Emergency Management Group (EMG)

The EMG is the team responsible for the big picture. It controls all incident-related activities. The Incident Commander (IC) oversees the technical aspects of the response.

The EMG supports the IC by allocating resources and by interfacing with the community, the media, outside response organizations and regulatory agencies.

The EMG is headed by the Emergency Director (ED), who should be the facility manager. The ED is in command and control of all aspects of the emergency. Other EMG members should be senior managers who have the authority to:

- Determine the short- and long-term effects of an emergency
- Order the evacuation or shutdown of the facility
- Interface with outside organizations and the media
- Issue press releases

The relationship between the EMG and the IC is shown in Figure 1.

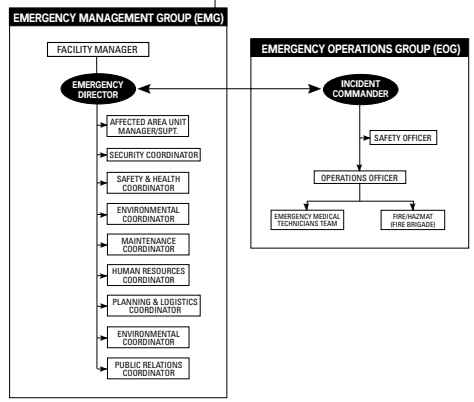


Figure 1: Relationship between the EMG and the IC.

In a hazardous materials accident, an off-site medic was exposed to the spilled material and required hospitalization. It was determined that the person was able to enter the hazardous area unprotected because no one among a host of managers and facility responders was "in charge" at the scene.

EOC Resources:

- Communications equipment
- A copy of the emergency management plan and EOC procedures
- Blueprints, maps, status boards
- A list of EOC personnel and descriptions of their duties
- Technical information and data for advising responders
- Building security system information
- Information and data management capabilities
- Telephone directories
- Backup power, communications and lighting
- Emergency supplies

Incident Command System (ICS)

The ICS was developed specifically for the fire service, but its principles can be applied to all emergencies. The ICS provides for coordinated response and a clear chain of command and safe operations.

The Incident Commander (IC) is responsible for front-line management of the incident, for tactical planning and execution, for determining whether outside assistance is needed and for relaying requests for internal resources or outside assistance through the Emergency Operations Center (EOC).

The IC can be any employee, but a member of management with the authority to make decisions is usually the best choice.

The IC must have the capability and authority to:

- Assume command
- Assess the situation
- Implement the emergency management plan
- Determine response strategies
- Activate resources
- Order an evacuation
- Oversee all incident response activities
- Declare that the incident is "over"

Emergency Operations Center (EOC)

The EOC serves as a centralized management center for emergency operations. Here, decisions are made by the EMG based upon information provided by the IC and other personnel. Regardless of size or process, every facility should designate an area where decision makers can gather during an emergency.

The EOC should be located in an area of the facility not likely to be involved in an incident, perhaps the security department, the manager's office, a conference room or the training center. An alternate EOC should be designated in the event that the primary location is not usable.

Each facility must determine its requirements for an EOC based upon the functions to be performed and the number of people involved. Ideally, the EOC is a dedicated area equipped with communications equipment, reference materials, activity logs and all the tools necessary to respond quickly and appropriately to an emergency.

Planning Considerations

To develop a direction and control system:

- Define the duties of personnel with an assigned role. Establish procedures for each position. Prepare checklists for all procedures.
- Define procedures and responsibilities for fire fighting, medical and health, and engineering.
- Determine lines of succession to ensure continuous leadership, authority and responsibility in key positions.
- Determine equipment and supply needs for each response function.
- At a minimum, assign all personnel responsibility for:
  - Recognizing and reporting an emergency
  - Warning other employees in the area
  - Taking security and safety measures
  - Evacuating safely
- Provide training.

Security

Isolation of the incident scene must begin when the emergency is discovered. If possible, the discoverer should attempt to secure the scene and control access, but no one should be placed in physical danger to perform these functions.

Basic security measures include:

- Closing doors or windows
- Establishing temporary barriers with furniture after people have safely evacuated
- Dropping containment materials (sorbent pads, etc.) in the path of leaking materials
- Closing file cabinets or desk drawers

Only trained personnel should be allowed to perform advanced security measures. Access to the facility, the EOC and the incident scene should be limited to persons directly involved in the response.

Coordination of Outside Response

In some cases, laws, codes, prior agreements or the very nature of the emergency require the IC to turn operations over to an outside response organization.

When this happens, the protocols established between the facility and outside response organizations are implemented. The facility's IC provides the community's IC a complete report on the situation.

The facility IC keeps track of which organizations are on-site and how the response is being coordinated. This helps increase personnel safety and accountability, and prevents duplication of effort.

Keep detailed logs of actions taken during an emergency. Describe what happened, decisions made and any deviations from policy. Log the time for each event.

FUNCTION

COMMUNICATIONS

COMMUNICATIONS. Communications are essential to any business operation. A communications failure can be a disaster in itself, cutting off vital business activities.

Communications are needed to report emergencies, to warn personnel of the danger, to keep families and off-duty employees informed about what's happening at the facility to coordinate response actions and to keep in contact with customers and suppliers.

Contingency Planning

Plan for all possible contingencies from a temporary or short-term disruption to a total communications failure.

- Consider the everyday functions performed by your facility and the communications, both voice and data, used to support them.
- Consider the business impact if your communications were inoperable. How would this impact your emergency operations?
- Prioritize all facility communications. Determine which should be restored first in an emergency.
- Establish procedures for restoring communications systems.
- Talk to your communications vendors about their emergency response capabilities. Establish procedures for restoring services.
- Determine needs for backup communications for each business function. Options include messengers, telephones, portable microwave, amateur radios, point-to-point private lines, satellite, high-frequency radio.

Emergency Communications

Consider the functions your facility might need to perform in an emergency and the communications systems needed to support them.

Consider communications between:

- Emergency responders
- Responders and the Incident Commander (IC)
- The IC and the Emergency Operations Center (EOC)
- The IC and employees
- The EOC and outside response organizations
- The EOC and neighboring businesses
- The EOC and employees' families
- The EOC and customers
- The EOC and media

Test communications often. A research firm discovered in a drill that its two-way radio system did not work, limiting communications between the Emergency Operating Center (EOC) and the Incident Commander (IC) to a single telephone line. The Emergency Management Group had failed to provide a backup radio for the EOC. Fortunately, this was discovered during training.

Test alarm systems monthly. One company conducted its first test of a sophisticated alarm system 21 years after the system was installed. Rather than alarm bells, the system played Christmas music.

Methods of communication include:

- Messenger
- Telephone
- Two-way radio
- FAX machine
- Microwave
- Satellite
- Dial-up modems
- Local area networks
- Hand signals

Family Communications

In an emergency, personnel will need to know whether their families are okay. Taking care of one's loved ones is always a first priority.

Make plans for communicating with employees' families in an emergency.

Also, encourage employees to:

- Consider how they would communicate with their families in case they are separated from one another or injured in an emergency.
- Arrange for an out-of-town contact for all family members to call in an emergency.
- Designate a place to meet family members in case they cannot get home in an emergency.

Notification

Establish procedures for employees to report an emergency. Inform employees of procedures. Train personnel assigned specific notification tasks.

Post emergency telephone numbers near each telephone, on employee bulletin boards and in other prominent locations.

Maintain an updated list of addresses and telephone and pager numbers of key emergency response personnel (from within and outside the facility).

Listen for tornado, hurricane and other severe weather warnings issued by the National Weather Service.

Determine government agencies' notification requirements in advance. Notification must be made immediately to local government agencies when an emergency has the potential to affect public health and safety.

Prepare announcements that could be made over public address systems.

Warning

Establish a system for warning personnel of an emergency. The system should:

- Be audible or within view by all people in the facility
- Have an auxiliary power supply
- Have a distinct and recognizable signal

Make plans for warning persons with disabilities. For instance, a flashing strobe light can be used to warn hearing-impaired people.

Familiarize personnel with procedures for responding when the warning system is activated.

Establish procedures for warning customers, contractors, visitors and others who may not be familiar with the facility's warning system.

Test your facility's warning system at least monthly.

LIFE SAFETY. Protecting the health and safety of everyone in the facility is the first priority during an emergency.

FUNCTION

LIFE

SAFETY

Evacuation Planning

One common means of protection is evacuation. In the case of fire, an immediate evacuation to a predetermined area away from the facility may be necessary. In a hurricane, evacuation could involve the entire community and take place over a period of days.

To develop an evacuation policy and procedure:

- Determine the conditions under which an evacuation would be necessary.
- Establish a clear chain of command. Identify personnel with the authority to order an evacuation. Designate "evacuation wardens" to assist others in an evacuation and to account for personnel.
- Establish specific evacuation procedures. Establish a system for accounting for personnel. Consider employees' transportation needs for community-wide evacuations.
- Establish procedures for assisting persons with disabilities and those who do not speak English.
- Post evacuation procedures.
- Designate personnel to continue or shut down critical operations while an evacuation is underway. They must be capable of recognizing when to abandon the operation and evacuate themselves.
- Coordinate plans with the local emergency management office.

Evacuation Routes and Exits

Designate primary and secondary evacuation routes and exits. Have them clearly marked and well lit. Post signs.

Install emergency lighting in case a power outage occurs during an evacuation.

Ensure that evacuation routes and emergency exits are:

- Wide enough to accommodate the number of evacuating personnel
- Clear and unobstructed at all times
- Unlikely to expose evacuating personnel to additional hazards

Have evacuation routes evaluated by someone not in your organization.

Consider how you would access important personal information about employees (home phone, next-of-kin, medical) in an emergency. Storing information on computer disks or in sealed envelopes are two options.

A gas explosion and fire in a nursing home caused the evacuation of all patients, most of whom were disabled. Because the staff had trained for this scenario, all patients were evacuated safely.

Search and rescue should be conducted only by properly trained and equipped professionals. Death or serious injury can occur when untrained employees reenter a damaged or contaminated facility.

Assembly Areas and Accountability

Obtaining an accurate account of personnel after a site evacuation requires planning and practice.

- Designate assembly areas where personnel should gather after evacuating.
- Take a head count after the evacuation. The names and last known locations of personnel not accounted for should be determined and given to the EOC. (Confusion in the assembly areas can lead to unnecessary and dangerous search and rescue operations.)
- Establish a method for accounting for non-employees such as suppliers and customers.
- Establish procedures for further evacuation in case the incident expands. This may consist of sending employees home by normal means or providing them with transportation to an off-site location.

Shelter

In some emergencies, the best means of protection is to take shelter either within the facility or away from the facility in a public building.

- Consider the conditions for taking shelter, e.g., tornado warning.
- Identify shelter space in the facility and in the community. Establish procedures for sending personnel to shelter.
- Determine needs for emergency supplies such as water, food and medical supplies.
- Designate shelter managers, if appropriate.
- Coordinate plans with local authorities.

Training and Information

Train employees in evacuation, shelter and other safety procedures. Conduct sessions at least annually or when:

- Employees are hired
- Evacuation wardens, shelter managers and others with special assignments are designated
- New equipment, materials or processes are introduced
- Procedures are updated or revised
- Exercises show that employee performance must be improved

Provide emergency information such as checklists and evacuation maps.

Post evacuation maps in strategic locations.

Consider the information needs of customers and others who visit the facility.

Family Preparedness

Consider ways to help employees prepare their families for emergencies. This will increase their personal safety and help the facility get back up and running. Those who are prepared at home will be better able to carry out their responsibilities at work.

PROPERTY PROTECTION. Protecting facilities, equipment and vital records is essential to restoring operations once an emergency has occurred.

FUNCTION

PROPERTY

PROTECTION

Planning Considerations

Establish procedures for:

- Fighting fires
- Containing material spills
- Closing or barricading doors and windows
- Shutting down equipment
- Covering or securing equipment
- Moving equipment to a safe location

Identify sources of backup equipment, parts and supplies.

Designate personnel to authorize, supervise and perform a facility shutdown. Train them to recognize when to abandon the effort.

Obtain materials to carry out protection procedures and keep them on hand for use only in emergencies.

Protection Systems

Determine needs for systems to detect abnormal situations, provide warning and protect property. Consider:

- Fire protection systems
- Lightning protection systems
- Water-level monitoring systems
- Overflow detection devices
- Automatic shutoffs
- Emergency power generation systems

Consult your property insurer about special protective systems.

Mitigation

Consider ways to reduce the effects of emergencies, such as moving or constructing facilities away from flood plains and fault zones. Also consider ways to reduce the chances of emergencies from occurring, such as changing processes or materials used to run the business.

Consider physical retrofitting measures such as:

- Upgrading facilities to withstand the shaking of an earthquake or high winds
- "Floodproofing" facilities by constructing flood walls or other flood protection devices (see Section 3 for additional information)
- Installing fire sprinkler systems
- Installing fire-resistant materials and furnishing
- Installing storm shutters for all exterior windows and doors

There are also non-structural mitigation measures to consider, including:

- Installing fire-resistant materials and furnishing
- Securing light fixtures and other items that could fall or shake loose in an emergency
- Moving heavy or breakable objects to low shelves
- Attaching cabinets and files to low walls or bolting them together
- Placing Velcro strips under typewriters, tabletop computers and television monitors
- Moving work stations away from large windows
- Installing curtains or blinds that can be drawn over windows to prevent glass from shattering onto employees
- Anchoring water heaters and bolting them to wall studs

Consult a structural engineer or architect and your community's building and zoning offices for additional information.

Facility Shutdown

Facility shutdown is generally a last resort but always a possibility. Improper or disorganized shutdown can result in confusion, injury and property damage.

Some facilities require only simple actions such as turning off equipment, locking doors and activating alarms. Others require complex shutdown procedures.

Work with department heads to establish shutdown procedures. Include information about when and how to shut off utilities. Identify:

- The conditions that could necessitate a shutdown
- Who can order a shutdown
- Who will carry out shutdown procedures
- How a partial shutdown would affect other facility operations
- The length of time required for shutdown and restarting

Train personnel in shutdown procedures. Post procedures.

Records Preservation

Vital records may include:

- Financial and insurance information
- Engineering plans and drawings
- Product lists and specifications
- Employee, customer and supplier databases
- Formulas and trade secrets
- Personnel files

Preserving vital records is essential to the quick restoration of operations. Analyzing vital records involves:

1. Classifying operations into functional categories, e.g., finance, production, sales, administration
2. Determining essential functions for keeping the business up and running, such as finance, production, sales, etc.
3. Identifying the minimum information that must be readily accessible to perform essential functions, e.g., maintaining customer collections may require access to account statements
4. Identifying the records that contain the essential information and where they are located
5. Identifying the equipment and materials needed to access and use the information

Next, establish procedures for protecting and accessing vital records. Among the many approaches to consider are:

- Labeling vital records
- Backing up computer systems
- Making copies of records
- Storing tapes and disks in insulated containers
- Storing data off-site where they would not likely be damaged by an event affecting your facility
- Increasing security of computer facilities
- Arranging for evacuation of records to backup facilities
- Backing up systems handled by service bureaus
- Arranging for backup power

COMMUNITY OUTREACH. Your facility's relationship with the community will influence your ability to protect personnel and property and return to normal operations.

This section describes ways to involve outside organizations in the emergency management plan.

FUNCTION

COMMUNITY

OUTREACH

Involving the Community

Maintain a dialogue with community leaders, first responders, government agencies, community organizations and utilities, including:

- Appointed and elected leaders
- Fire, police and emergency medical services personnel
- Local Emergency Planning Committee (LEPC) members
- Emergency management director
- Public Works Department
- American Red Cross
- Hospitals
- Telephone company
- Electric utility
- Neighborhood groups

Have regular meetings with community emergency personnel to review emergency plans and procedures. Talk about what you're doing to prepare for and prevent emergencies. Explain your concern for the community's welfare.

Identify ways your facility could help the community in a community-wide emergency.

Look for common interests and concerns. Identify opportunities for sharing resources and information.

Conduct confidence-building activities such as facility tours. Do a facility walk-through with community response groups.

Involve community fire, police and emergency management personnel in drills and exercises.

Meet with your neighbors to determine how you could assist each other in an emergency.

Mutual Aid Agreements

To avoid confusion and conflict in an emergency, establish mutual aid agreements with local response agencies and businesses.

These agreements should:

- Define the type of assistance
- Identify the chain of command for activating the agreement
- Define communications procedures

Include these agencies in facility training exercises whenever possible.

Mutual aid agreements can address any number of activities or resources that might be needed in an emergency. For example:

- Providing for firefighting and HAZMAT response.
- Providing shelter space, emergency storage, emergency supplies, medical support.
- Businesses allowing neighbors to use their property to account for personnel after an evacuation.

The community wants to know:

- What does the facility do?
- What are the hazards?
- What programs are in place to respond to emergencies?
- How could a site emergency affect the community?
- What assistance will be required from the community?

Community Service

In community-wide emergencies, business and industry are often needed to assist the community with:

- Personnel
- Equipment
- Shelter
- Training
- Storage
- Feeding facilities
- EOC facilities
- Food, clothing, building materials
- Funding
- Transportation

While there is no way to predict what demands will be placed on your company's resources, give some thought to how the community's needs might influence your corporate responsibilities in an emergency. Also, consider the opportunities for community service before an emergency occurs.

Public Information

When site emergencies expand beyond the facility, the community will want to know the nature of the incident, whether the public's safety or health is in danger, what is being done to resolve the problem and what was done to prevent the situation from happening.

Determine the audiences that may be affected by an emergency and identify their information needs. Include:

- The public
- The media
- Employees and retirees
- Unions
- Contractors and suppliers
- Customers
- Shareholders
- Emergency response organizations
- Regulatory agencies
- Appointed and elected officials
- Special interest groups
- Neighbors

Media Relations

In an emergency, the media are the most important link to the public. Try to develop and maintain positive relations with media outlets in your area. Determine their particular needs and interests. Explain your plan for protecting personnel and preventing emergencies.

Determine how you would communicate important public information through the media in an emergency.

- Designate a trained spokesperson and an alternate spokesperson
- Set up a media briefing area
- Establish security procedures
- Establish procedures for ensuring that information is complete, accurate and approved for public release
- Determine an appropriate and useful way of communicating technical information
- Prepare background information about the facility

When providing information to the media during an emergency:

Do's

- Give all media equal access to information.
- When appropriate, conduct press briefings and interviews. Give local and national media equal time.
- Try to observe media deadlines.
- Escort media representatives to ensure safety.
- Keep records of information released.
- Provide press releases when possible.

Don'ts

- Do not speculate about the incident.
- Do not permit unauthorized personnel to release information.
- Do not cover up facts or mislead the media.
- Do not place blame for the incident.

Press releases about facility-generated emergencies should describe who is involved in the incident and what happened, including when, where, why and how.

RECOVERY AND RESTORATION. Business recovery and restoration, or business resumption, goes right to a facility's bottom line: keeping people employed and the business running.

FUNCTION

RECOVERY

AND

RESTORATION

Planning Considerations

Consider making contractual arrangements with vendors for such post-emergency services as records preservation, equipment repair, earthmoving or engineering.

Meet with your insurance carriers to discuss your property and business resumptions policies (see the next page for guidelines).

Determine critical operations and make plans for bringing those systems back on-line. The process may entail:

- Repairing or replacing equipment
- Relocating operations to an alternate location
- Contracting operations on a temporary basis

Take photographs or videotape the facility to document company assets. Update these records regularly.

Continuity of Management

You can assume that not every key person will be readily available or physically at the facility after an emergency. Ensure that recovery decisions can be made without undue delay. Consult your legal department regarding laws and corporate bylaws governing continuity of management.

Establish procedures for:

- Assuring the chain of command
- Maintaining lines of succession for key personnel
- Moving to alternate headquarters

Include these considerations in all exercise scenarios.

After a site emergency, assess the impact of the event on business neighbors and the community and take appropriate action. How you handle this issue will have long-lasting consequences.

Insurance

Most companies discover that they are not properly insured only after they have suffered a loss. Lack of appropriate insurance can be financially devastating. Discuss the following topics with your insurance advisor to determine your individual needs.

- How will my property be valued?
- Does my policy cover the cost of required upgrades to code?
- How much insurance am I required to carry to avoid becoming a co-insurer?
- What perils or causes of loss does my policy cover?
- What are my deductibles?
- What does my policy require me to do in the event of a loss?
- What types of records and documentation will my insurance company want to see? Are records in a safe place where they can be obtained after an emergency?
- To what extent am I covered for loss due to interruption of power? Is coverage provided for both on- and off-premises power interruption?
- Am I covered for lost income in the event of business interruption because of a loss? Do I have enough coverage? For how long is coverage provided? How long is my coverage for lost income if my business is closed by order of a civil authority?
- To what extent am I covered for reduced income due to customers' not all immediately coming back once the business reopens?
- How will my emergency management program affect my rates?

Employee Support

Since employees who will rely on you for support after an emergency are your most valuable asset, consider the range of services that you could provide or arrange for, including:

- Cash advances
- Salary continuation
- Flexible work hours
- Reduced work hours
- Crisis counseling
- Care packages
- Day care

Resuming Operations

Immediately after an emergency, take steps to resume operations.

- Establish a recovery team, if necessary. Establish priorities for resuming operations.
- Continue to ensure the safety of personnel on the property. Assess remaining hazards. Maintain security at the incident scene.
- Conduct an employee briefing.
- Keep detailed records. Consider audio recording all decisions. Take photographs of or videotape the damage.
- Account for all damage-related costs. Establish special job order numbers and charge codes for purchases and repair work.
- Follow notification procedures. Notify employees' families about the status of personnel on the property. Notify off-duty personnel about work status. Notify insurance carriers and appropriate government agencies.
- Protect undamaged property. Close up building openings. Remove smoke, water and debris. Protect equipment against moisture. Restore sprinkler systems. Physically secure the property. Restore power.
- Conduct an investigation. Coordinate actions with appropriate government agencies.
- Conduct salvage operations. Segregate damaged from undamaged property. Keep damaged goods on hand until an insurance adjuster has visited the premises, but you can move material outside if it's seriously in the way and exposure to the elements won't make matters worse.
- Take an inventory of damaged goods. This is usually done with the adjuster, or the adjuster's salvor if there is any appreciable amount of goods or value. If you release goods to the salvor, obtain a signed inventory stating the quantity and type of goods being removed.
- Restore equipment and property. For major repair work, review restoration plans with the insurance adjuster and appropriate government agencies.
- Assess the value of damaged property. Assess the impact of business interruption.
- Maintain contact with customers and suppliers.

ADMINISTRATION AND LOGISTICS. Maintain complete and accurate records at all times to ensure a more efficient emergency response and recovery. Certain records may also be required by regulation or by your insurance carriers or prove invaluable in the case of legal action after an incident.

FUNCTION

ADMINISTRATION AND LOGISTICS

Administrative Actions

Administrative actions prior to an emergency include:

- Establishing a written emergency management plan
- Maintaining training records
- Maintaining all written communications
- Documenting drills and exercises and their critiques
- Involving community emergency response organizations in planning activities

Administrative actions during and after an emergency include:

- Maintaining telephone logs
- Keeping a detailed record of events
- Maintaining a record of injuries and follow-up actions
- Accounting for personnel
- Coordinating notification of family members
- Issuing press releases
- Maintaining sampling records
- Managing finances
- Coordinating personnel services
- Documenting incident investigations and recovery operations

Logistics

Before an emergency, logistics may entail:

- Acquiring equipment
- Stockpiling supplies
- Designating emergency facilities
- Establishing training facilities
- Establishing mutual aid agreements
- Preparing a resource inventory

During an emergency, logistics may entail the provision of:

- Providing utility maps to emergency responders
- Providing material safety data sheets to employees
- Moving backup equipment in place
- Repairing parts
- Arranging for medical support, food and transportation
- Arranging for shelter facilities
- Providing for backup power
- Providing for backup communications

Emergency funding can be critical immediately following an emergency. Consider the need for pre-approved purchase requisitions and whether special funding authorities may be necessary.

SECTION

3

HAZARD-SPECIFIC INFORMATION

This section provides information about some of the most common hazards:

- Fire
- Hazardous Materials Incidents
- Floods and Flash Floods
- Hurricanes
- Tornadoes
- Severe Winter Storms
- Earthquakes
- Technological Emergencies

FIRE. Fire is the most common of all the hazards. Every year fires cause thousands of deaths and injuries and billions of dollars in property damage.

Planning Considerations

Consider the following when developing your plan:

- Meet with the fire department to talk about the community's fire response capabilities. Talk about your operations. Identify processes and materials that could cause or fuel a fire, or contaminate the environment in a fire.
- Have your facility inspected for fire hazards. Ask about fire codes and regulations.
- Ask your insurance carrier to recommend fire prevention and protection measures. Your carrier may also offer training.
- Distribute fire safety information to employees: how to prevent fires in the workplace, how to contain a fire, how to evacuate the facility, where to report a fire.
- Instruct personnel to use the stairs — not elevators — in a fire. Instruct them to crawl on their hands and knees when escaping a hot or smoke-filled area.
- Conduct evacuation drills. Post maps of evacuation routes in prominent places. Keep evacuation routes including stairways and doorways clear of debris.
- Assign fire wardens for each area to monitor shutdown and evacuation procedures.
- Establish procedures for the safe handling and storage of flammable liquids and gases. Establish procedures to prevent the accumulation of combustible materials.
- Provide for the safe disposal of smoking materials.
- Establish a preventive maintenance schedule to keep equipment operating safely.
- Place fire extinguishers in appropriate locations.
- Train employees in use of fire extinguishers.

- Install smoke detectors. Check smoke detectors once a month, change batteries at least once a year.
- Establish a system for warning personnel of a fire. Consider installing a fire alarm with automatic notification to the fire department.
- Consider installing a sprinkler system, fire hoses and fire-resistant walls and doors.
- Ensure that key personnel are familiar with all fire safety systems.
- Identify and mark all utility shutoffs so that electrical power, gas or water can be shut off quickly by fire wardens or responding personnel.
- Determine the level of response your facility will take if a fire occurs. Among the options are:

  Option 1 — Immediate evacuation of all personnel on alarm.

  Option 2 — All personnel are trained in fire extinguisher use. Personnel in the immediate area of a fire attempt to control it. If they cannot, the fire alarm is sounded and all personnel evacuate.

  Option 3 — Only designated personnel are trained in fire extinguisher use.

  Option 4 — A fire team is trained to fight incipient-stage fires that can be controlled without protective equipment or breathing apparatus. Beyond this level fire, the team evacuates.

  Option 5 — A fire team is trained and equipped to fight structural fires using protective equipment and breathing apparatus.

HAZARDOUS MATERIALS INCIDENTS. Hazardous materials are substances that are either flammable or combustible, explosive, toxic, noxious, corrosive, oxidizable, an irritant or radioactive.

A hazardous material spill or release can pose a risk to life, health or property. An incident can result in the evacuation of a few people, a section of a facility or an entire neighborhood.

There are a number of Federal laws that regulate hazardous materials, including: the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Resource Conservation and Recovery Act of 1976 (RCRA), the Hazardous Materials Transportation Act (HMTA), the Occupational Safety and Health Act (OSHA), the Toxic Substances Control Act (TSCA) and the Clean Air Act.

Title III of SARA regulates the packaging, labeling, handling, storage and transportation of hazardous materials. The law requires facilities to furnish information about the quantities and health effects of materials used at the facility, and to promptly notify local and State officials whenever a significant release of hazardous materials occurs.

In addition to on-site hazards, you should be aware of the potential for an off-site incident affecting your operations. You should also be aware of hazardous materials used in facility processes and in the construction of the physical plant.

Detailed definitions as well as lists of hazardous materials can be obtained from the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA).

FLOODS AND FLASH FLOODS. Floods are the most common and widespread of all natural disasters. Most communities in the United States can experience some degree of flooding after spring rains, heavy thunderstorms or winter snow thaws.

Most floods develop slowly over a period of days. Flash floods, however, are like walls of water that develop in a matter of minutes. Flash floods can be caused by intense storms or dam failure.

Planning Considerations

Consider the following when preparing for floods:

- Ask your local emergency management office whether your facility is located in a flood plain. Learn the history of flooding in your area. Learn the elevation of your facility in relation to steams, rivers and dams.
- Review the community's emergency plan. Learn the community's evacuation routes. Know where to find higher ground in case of a flood.
- Establish warning and evacuation procedures for the facility. Make plans for assisting employees who may need transportation.
- Inspect areas in your facility subject to flooding. Identify records and equipment that can be moved to a higher location. Make plans to move records and equipment in case of flood.
- Purchase a NOAA Weather Radio with a warning alarm tone and battery backup. Listen for flood watches and warnings.

  Flood Watch *— Flooding is possible. Stay tuned to NOAA radio. Be prepared to evacuate. Tune to local radio and television stations for additional information.*

  Flood Warning *— Flooding is already occurring or will occur soon. Take precautions at once. Be prepared to go to higher ground. If advised, evacuate immediately.*
- Ask your insurance carrier for information about flood insurance. Regular property and casualty insurance does not cover flooding.

Planning Considerations

Consider the following when developing your plan:

- Identify and label all hazardous materials stored, handled, produced and disposed of by your facility. Follow government regulations that apply to your facility. Obtain material safety data sheets (MSDS) for all hazardous materials at your location.
- Ask the local fire department for assistance in developing appropriate response procedures.
- Train employees to recognize and report hazardous material spills and releases. Train employees in proper handling and storage.
- Establish a hazardous material response plan:
  - Establish procedures to notify management and emergency response organizations of an incident.
  - Establish procedures to warn employees of an incident.
  - Establish evacuation procedures.
  - Depending on your operations, organize and train an emergency response team to confine and control hazardous material spills in accordance with applicable regulations.
- Identify other facilities in your area that use hazardous materials. Determine whether an incident could affect your facility.
- Identify highways, railroads and waterways near your facility used for the transportation of hazardous materials. Determine how a transportation accident near your facility could affect your operations.

- Consider the feasibility of floodproofing your facility. There are three basic types of methods.

1. **Permanent floodproofing measures** are taken before a flood occurs and require no human intervention when flood waters rise. They include:
   - Filling windows, doors or other openings with water-resistant materials such as concrete blocks or bricks. This approach assumes the structure is strong enough to withstand flood waters.
   - Installing check valves to prevent water from entering where utility and sewer lines enter the facility.
   - Reinforcing walls to resist water pressure. Sealing walls to prevent or reduce seepage.
   - Building watertight walls around equipment or work areas within the facility that are particularly susceptible to flood damage.
   - Constructing floodwalls or levees outside the facility to keep flood waters away.
   - Elevating the facility on walls, columns or compacted fill. This approach is most applicable to new construction, though many types of buildings can be elevated.
2. **Contingent floodproofing measures** are also taken before a flood but require some additional action when flooding occurs. These measures include:
   - Installing watertight barriers called flood shields to prevent the passage of water through doors, windows, ventilation shafts or other openings
   - Installing permanent watertight doors
   - Constructing movable floodwalls
   - Installing permanent pumps to remove flood waters
3. **Emergency floodproofing measures** are generally less expensive than those listed above, though they require substantial advance warning and do not satisfy the minimum requirements for watertight floodproofing as set forth by the National Flood Insurance Program (NFIP). They include:
   - Building walls with sandbags
   - Constructing a double row of walls with boards and posts to create a "crib," then filling the crib with soil
   - Constructing a single wall by stacking small beams or planks on top of each other

- Consider the need for backup systems:
  - Portable pumps to remove flood water
  - Alternate power sources such as generators or gasoline-powered pumps
  - Battery-powered emergency lighting
- Participate in community flood control projects.

HURRICANES.

Hurricanes are severe tropical storms with sustained winds of 74 miles per hour or greater. Hurricane winds can reach 160 miles per hour and extend inland for hundreds of miles.

Hurricanes bring torrential rains and a storm surge of ocean water that crashes into land as the storm approaches. Hurricanes also spawn tornadoes.

Hurricane advisories are issued by the National Weather Service as soon as a hurricane appears to be a threat. The hurricane season lasts from June through November.

Planning Considerations

The following are considerations when preparing for hurricanes:

- Ask your local emergency management office about community evacuation plans.
- Establish facility shutdown procedures. Establish warning and evacuation procedures. Make plans for assisting employees who may need transportation.
- Make plans for communicating with employees' families before and after a hurricane.
- Purchase a NOAA Weather Radio with a warning alarm tone and battery backup. Listen for hurricane watches and warnings.

Hurricane Watch *— A hurricane is possible within 24 to 36 hours. Stay tuned for additional advisories. Tune to local radio and television stations for additional information. An evacuation may be necessary.*

Hurricane Warning *— A hurricane will hit land within 24 hours. Take precautions at once. If advised, evacuate immediately.*

- Survey your facility. Make plans to protect outside equipment and structures.
- Make plans to protect windows. Permanent storm shutters offer the best protection. Covering windows with 5/8" marine plywood is a second option.
- Consider the need for backup systems:
  - Portable pumps to remove flood water
  - Alternate power sources such as generators or gasoline-powered pumps
  - Battery-powered emergency lighting
- Prepare to move records, computers and other items within your facility or to another location.

TORNADOES. Tornadoes are incredibly violent local storms that extend to the ground with whirling winds that can reach 300 mph.

HAZARDS

TORNADOES

Spawned from powerful thunderstorms, tornadoes can uproot trees and buildings and turn harmless objects into deadly missiles in a matter of seconds. Damage paths can be in excess of one mile wide and 50 miles long.

Tornadoes can occur in any state but occur more frequently in the Midwest, Southeast and Southwest. They occur with little or no warning.

Planning Considerations

The following are considerations when planning for tornadoes:

- Ask your local emergency management office about the community's tornado warning system.
- Purchase a NOAA Weather Radio with a warning alarm tone and battery backup. Listen for tornado watches and warnings.

Tornado Watch *— Tornadoes are likely. Be ready to take shelter. Stay tuned to radio and television stations for additional information.*

Tornado Warning *— A tornado has been sighted in the area or is indicated by radar. Take shelter immediately.*

- Establish procedures to inform personnel when tornado warnings are posted. Consider the need for spotters to be responsible for looking out for approaching storms.
- Work with a structural engineer or architect to designate shelter areas in your facility. Ask your local emergency management office or National Weather Service office for guidance.
- Consider the amount of space you will need. Adults require about six square feet of space; nursing home and hospital patients require more.
- The best protection in a tornado is usually an underground area. If an underground area is not available, consider:
  - Small interior rooms on the lowest floor and without windows
  - Hallways on the lowest floor away from doors and windows
  - Rooms constructed with reinforced concrete, brick or block with no windows and a heavy concrete floor or roof system overhead
  - Protected areas away from doors and windows

Note: Auditoriums, cafeterias and gymnasiums that are covered with a flat, wide-span roof are not considered safe.

- Make plans for evacuating personnel away from lightweight modular offices or mobile home-size buildings. These structures offer no protection from tornadoes.
- Conduct tornado drills.
- Once in the shelter, personnel should protect their heads with their arms and crouch down.

HAZARDS

SEVERE WINTER STORMS

SEVERE WINTER STORMS. Severe winter storms bring heavy snow, ice, strong winds and freezing rain. Winter storms can prevent employees and customers from reaching the facility, leading to a temporary shutdown until roads are cleared. Heavy snow and ice can also cause structural damage and power outages.

Planning Considerations

Following are considerations for preparing for winter storms:

- Listen to NOAA Weather Radio and local radio and television stations for weather information:
  - ***Winter Storm Watch*** *— Severe winter weather is possible.*
  - ***Winter Storm Warning*** *— Severe winter weather is expected.*
  - ***Blizzard Warning*** *— Severe winter weather with sustained winds of at least 35 mph is expected.*
  - ***Traveler's Advisory*** *— Severe winter conditions may make driving difficult or dangerous.*
- Establish procedures for facility shutdown and early release of employees.
- Store food, water, blankets, battery-powered radios with extra batteries and other emergency supplies for employees who become stranded at the facility.
- Provide a backup power source for critical operations.
- Arrange for snow and ice removal from parking lots, walkways, loading docks, etc.

HAZARDS

EARTHQUAKES

EARTHQUAKES. Earthquakes occur most frequently west of the Rocky Mountains, although historically the most violent earthquakes have occurred in the central United States. Earthquakes occur suddenly and without warning.

Earthquakes can seriously damage buildings and their contents; disrupt gas, electric and telephone services; and trigger landslides, avalanches, flash floods, fires and huge ocean waves called tsunamis. Aftershocks can occur for weeks following an earthquake.

In many buildings, the greatest danger to people in an earthquake is when equipment and non-structural elements such as ceilings, partitions, windows and lighting fixtures shake loose.

Planning Considerations

Following are guidelines for preparing for earthquakes:

- Assess your facility's vulnerability to earthquakes. Ask local government agencies for seismic information for your area.
- Have your facility inspected by a structural engineer. Develop and prioritize strengthening measures. These may include:
  - Adding steel bracing to frames
  - Adding sheer walls to frames
  - Strengthening columns and building foundations
  - Replacing unreinforced brick filler walls
- Follow safety codes when constructing a facility or making major renovations.
- Inspect non-structural systems such as air conditioning, communications and pollution control systems. Assess the potential for damage. Prioritize measures to prevent damages.
- Inspect your facility for any item that could fall, spill, break or move during an earthquake. Take steps to reduce these hazards:
  - Move large and heavy objects to lower shelves or the floor. Hang heavy items away from where people work.
  - Secure shelves, filing cabinets, tall furniture, desktop equipment, computers, printers, copiers and light fixtures.
  - Secure fixed equipment and heavy machinery to the floor. Larger equipment can be placed on casters and attached to tethers which attach to the wall.
  - Add bracing to suspended ceilings, if necessary.
  - Install safety glass where appropriate.
  - Secure large utility and process piping.

- Keep copies of design drawings of the facility to be used in assessing the facility's safety after an earthquake.
- Review processes for handling and storing hazardous materials. Have incompatible chemicals stored separately.
- Ask your insurance carrier about earthquake insurance and mitigation techniques.
- Establish procedures to determine whether an evacuation is necessary after an earthquake.
- Designate areas in the facility away from exterior walls and windows where occupants should gather after an earthquake if an evacuation is not necessary.
- Conduct earthquake drills. Provide personnel with the following safety information:
  - In an earthquake, if indoors, stay there. Take cover under a sturdy piece of furniture or counter, or brace yourself against an inside wall. Protect your head and neck.
  - If outdoors, move into the open, away from buildings, street lights and utility wires.
  - After an earthquake, stay away from windows, skylights and items that could fall. Do not use the elevators.
  - Use stairways to leave the building if it is determined that a building evacuation is necessary.

TECHNOLOGICAL EMERGENCIES. Technological emergencies include any interruption or loss of a utility service, power source, life support system, information system or equipment needed to keep the business in operation.

Planning Considerations

The following are suggestions for planning for technological emergencies:

- Identify all critical operations, including:
  - Utilities including electric power, gas, water, hydraulics, compressed air, municipal and internal sewer systems, wastewater treatment services
  - Security and alarm systems, elevators, lighting, life support systems, heating, ventilation and air conditioning systems, electrical distribution system.
  - Manufacturing equipment, pollution control equipment
  - Communication systems, both data and voice computer networks
  - Transportation systems including air, highway, railroad and waterway
- Determine the impact of service disruption.
- Ensure that key safety and maintenance personnel are thoroughly familiar with all building systems.
- Establish procedures for restoring systems. Determine need for backup systems.
- Establish preventive maintenance schedules for all systems and equipment.

SECTION

4

INFORMATION SOURCES

This section provides information sources:

- Additional Readings from FEMA
- Ready-to-Print Brochures
- Emergency Management Offices

ADDITIONAL READINGS FROM FEMA. The following publications can be obtained from FEMA by writing to: FEMA, Publications, P.O. Box 2012, Jessup, MD 20794-2012.

- **Principal Threats Facing Communities and Local Emergency Management Coordinators** (FEMA 191) — Statistics and analyses of natural disasters and man-made threats in the U.S.
- **Floodproofing Non-Residential Structures** (FEMA 102) — Technical information for building owners, designers and contractors on floodproofing techniques (200 pages).
- **Non-Residential Floodproofing — Requirements and Certification for Buildings Located in Flood Hazard Areas in Accordance with the National Flood Insurance Program** (FIA-TB-3) — Planning and engineering considerations for floodproofing new commercial buildings.
- **Building Performance: Hurricane Andrew in Florida** (FIA 22) — Technical guidance for enhancing the performance of buildings in hurricanes.
- **Building Performance: Hurricane Iniki in Hawaii** (FIA 23) — Technical guidance for reducing hurricane and flood damage.
- **Answers to Questions About Substantially Damaged Buildings** (FEMA 213) — Information about regulations and policies of the National Flood Insurance Program regarding substantially damaged buildings (25 pages).
- **Design Guidelines for Flood Damage Reduction** (FEMA 15) — A study on land use, watershed management, design and construction practices in flood-prone areas.
- **Comprehensive Earthquake Preparedness Planning Guidelines: Corporate** (FEMA 71) — Earthquake planning guidance for corporate safety officers and managers.

READY-TO-PRINT BROCHURE MECHANICALS FOR YOUR EMPLOYEE SAFETY PROGRAM. You can provide your employees and customers with life-saving information from FEMA and the American Red Cross. Available at no charge is ready-to-print artwork for a series of brochures on disaster preparedness and family safety.

Select any of the brochures below, and you'll receive camera-ready materials, printing instructions and ideas for adding your own logo or sponsor message. Write to: Camera-ready Requests, Community & Family Preparedness Program, 500 C Street, SW Washington, DC 20472.

- **Your Family Disaster Plan** — A 4-step plan for individuals and families on how to prepare for any type of disaster.
- **Emergency Preparedness Checklist** — An action checklist on home safety, evacuation and disaster preparedness.
- **Your Family Disaster Supplies Kit** — A checklist of emergency supplies for the home and car.
- **Helping Children Cope With Disaster** — Practical advice on how to help children deal with the stress of disaster.

EMERGENCY MANAGEMENT OFFICES

FEMA Headquarters

Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, (202)646-2500.

FEMA Regional Offices

- Region 1: Boston (617)223-9540
- Region 2: New York (212)225-7209
- Region 3: Philadelphia (215)931-5500
- Region 4: Atlanta (404)853-4200
- Region 5: Chicago (312)408-5500
- Region 6: Denton, TX (817)898-5104
- Region 7: Kansas City, MO (816)283-7061
- Region 8: Denver (303)235-1813
- Region 9: San Francisco (415)923-7100
- Region 10: Bothell, WA (206)487-4604

State Emergency Management Agencies

(FEMA region numbers are in parentheses.)

Alabama (4)
Alabama Emergency Management Agency
5898 S. County Rd.41 Drawer 2160
Clanton, AL 35045-5160
(205)280-2201

Alaska (10)
Department of Military & Veteran Affairs
P.O. Box 5750
Camp Denali, AK 99595-5750
(907)428-7000

Arizona (9)
Arizona Division of Emergency Services
National Guard Bldg.
5636 E. McDowell Rd.
Phoenix, AZ 85008
(602)231-6245

Arkansas (6)
Office of Emergency Services
P.O. Box 758
Conway, AR 72032
(501)321-5601

California (9)
Office of Emergency Services
2800 Meadowview Rd.
Sacramento, CA 95823
(916)262-1816

Colorado (8)
Colorado Office of Emergency Management
Camp George West
Golden, CO 80401
(303)273-1622

Connecticut (1)
Connecticut Office of Emergency Management
360 Broad St.
Hartford, CT 06105
(203)566-3180

Delaware (3)
Division of Emergency Planning and Operations
P.O. Box 527
Delaware City, DE 19706
(302) 326-6000

District of Columbia (3)
Office of Emergency Preparedness
200 14th St., NW, 8th Floor
Washington, DC 20009
(202)727-3159

Florida (4)
Division of Emergency Management
2555 Shumar Oak Blvd.
Tallahassee, FL 32399-2100
(904)413-9969

Georgia (4)
Georgia Emergency Management Agency
P.O. Box 18055
Atlanta, GA 30316-0055
(404)635-7001

Hawaii (9)
State Civil Defense
3949 Diamond Head Rd.
Honolulu, HI 96816-4495
(808)733-4300

Idaho (10)
Bureau of Disaster Services
650 W. State St.
Boise, ID 83720
(208)334-2336

Illinois (5)
Illinois Emergency Management Agency
110 E. Adams St.
Springfield, IL 62706
(217)782-2700

Indiana (5)
Indiana Emergency Management Agency
State Office Bldg., Room E-208
302 W. Washington St.
Indianapolis, IN 46204
(317)232-3980

Iowa (7)
Iowa Emergency Management Division
Hoover State Office Bldg.
Level A, Room 29
Des Moines, IA 50319
(515)281-3231

Kansas (7)
Division of Emergency Preparedness
2800 S.W. Topeka Blvd
Topeka,KS 66611-1401

(913)274-1401

Kentucky (4)
Kentucky Disaster and Emergency Services
100 Minutemen Pkwy
Frankfort, KY 40601-6168
(502)564-8682

Louisiana (6)
Office of Emergency Preparedness
Department of Public Safety
LA Military Dept.
P.O. Box 44217
Capitol Station
Baton Rouge, LA 70804
(504)342-5470

Maine (1)
Maine Emergency Management Agency
72 State House Station
Augusta, ME 04333-0072
(207)287-4080

Maryland (3)
Maryland Emergency Management and Civil Defense Agency
Two Sudbrook Ln., East
Pikesville, MD 21208
(410)486-4422

Massachusetts (1)
Massachusetts Emergency Management Agency
P.O. Box 1496
Framingham, MA 01701-0317
(508)820-2000

Michigan (5)
Emergency Management Division
Michigan State Police
300 S. Washington Sq.
Suite 300
Lansing, MI 48913
(517)366-6198

Minnesota (5)
Division of Emergency Services
Department of Public Safety
State Capitol, B-5
St. Paul, MN 55155
(612)296-0450

Mississippi (4)
Mississippi Emergency Management Agency
P.O. Box 4501, Fondren Station
Jackson, MS 39296
(601)352-9100

Missouri (7)
State Emergency Management Agency
P.O. Box 116
Jefferson City, MO 65102
(573)526-9101

Montana (8)
Emergency Management Specialist
Disaster and Emergency Services
P.O. Box 4789
Helena, MT 59604-4789
(406)444-6911

Nebraska
Nebraska Civil Defense Agency
National Guard Center
1300 Military Road
Lincoln, NE 68508-1090
(402)471-7410

Nevada (9)
Nevada Division of Emergency Services
2525 S. Carson St.
Carson City, NV 89710
(702) 687-4240

New Hampshire (1)
Governor's Office of Emergency Management
State Office Park South
107 Pleasant St.
Concord, NH 03301-3809
(603)271-2231

New Jersey (2)
Office of Emergency Management
P.O. Box 7068
W. Trenton, NJ 08628-0068
(609)538-6050

New Mexico (6)
Emergency Planning and Coordination
Department of Public Safety
4491 Cerrillos Rd.
P.O. Box 1628
Santa Fe, NM 87504-1628
(505)827-9222

New York (2)
State Emergency Management Office
Bldg. #22, Suite 101

Albany, NY 12226-2251
(518)457-2222

North Carolina
Division of Emergency Management
116 West Jones St.
Raleigh, NC 27603-1335
(919)733-5406

North Dakota (8)
North Dakota Division of Emergency Management
P.O. Box 5511
Bismarck, ND 58502-5511
(701) 328-3300

Ohio (5)
Ohio Emergency Management Agency
2825 W. Dublin Granville Rd.
Columbus, OH 43235-2206
(614)889-7150

Oklahoma (6)
Oklahoma Civil Defense
P.O. Box 53365
Oklahoma City, OK 73152-3365
(405)521-2481

Oregon (10)
Emergency Management Division
Oregon State Executive Department
595 Cottage St., NE
Salem, OR 97310
(503)378-2911

Pennsylvania (3)
Pennsylvania Emergency Management Agency
P.O. Box 3321
Harrisburg, PA 17105-3321
(717) 651-2007

Puerto Rico (2)
State Civil Defense
Commonwealth of Puerto Rico
P.O. Box 5127
San Juan, PR 00906
(809)724-0124

Rhode Island (1)
Rhode Island Emergency Management Agency
675 New London Avenue
Cranston, RI 02920
(401) 946-9996

South Carolina (4)
South Carolina Emergency Management Division
1429 Senate St., Rutledge Bldg.
Columbia, SC 29201-3782
(803)734-8020

South Dakota (8)
Division of Emergency and Disaster Services
State Capitol, 500 East Capitol
Pierre, SD 57501
(605)773-3231

Tennessee (4)
Tennessee Emergency Management Agency
3041 Sidco Dr. P.O. 41502
Nashville, TN 37204-1502
(615)741-6528

Texas (6)
Division of Emergency Management
P.O. Box 4087
Austin, TX 78773-0001
(512)424-2000

Utah (8)
Division of Comprehensive Emergency Management
Sate Office Bldg., Room 1110
Salt Lake City, UT 84114
(801)538-3400

Vermont (1)
Vermont Emergency Management Agency
Dept. of Public Safety
Waterbury State Complex
103 S. Main St.
Waterbury, VT 05671-2101
(802)244-8271

Virgin Islands (2)
Territorial Emergency Management Agency
A & Q Building # 2c Estate Content
St Thomas, VI 00820
(809)773-2244

Virginia (3)
Department of Emergency Services
P.O. Box 40955
Richmond, VA 23225-6491
(804)674-2497

Washington (10)
Division of Emergency Management
4220 E. Martin Way, MS-PT 11
Olympia, WA 98504-0955
(360) 923-4505

West Virginia (3)
West Virginia Office of Emergency Services
State Capitol Complex
Room EB80
Charleston, WV 25305-0360
(304)558-5380

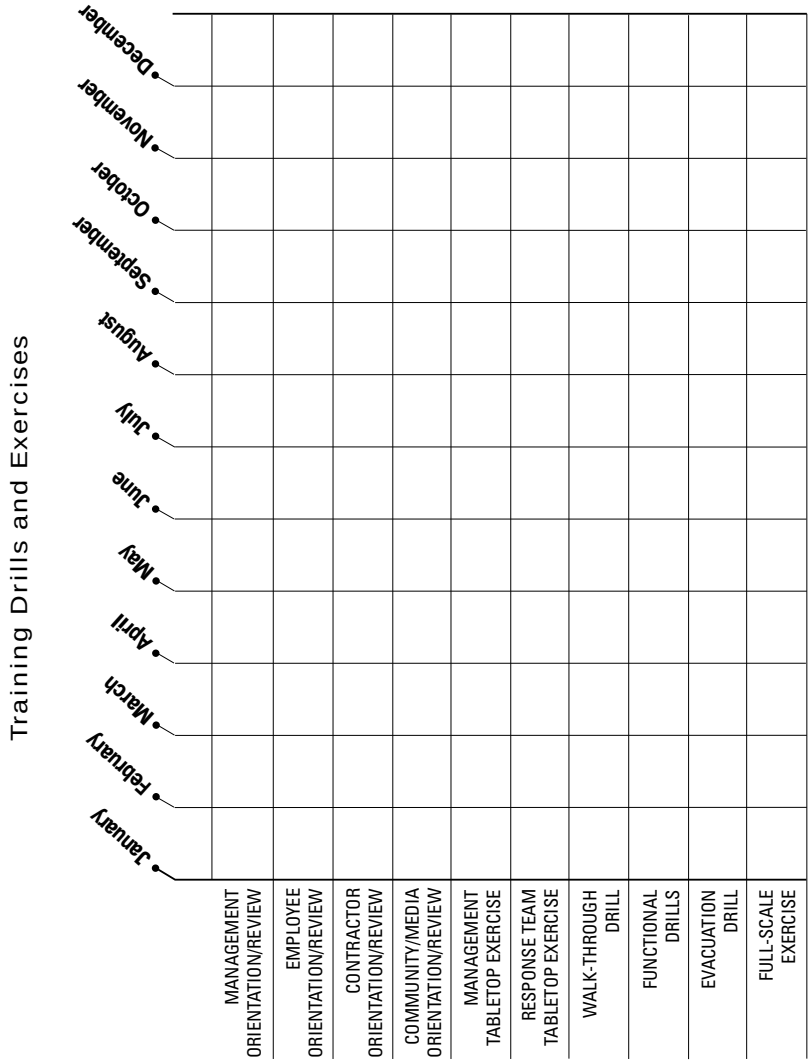
Wisconsin (5)
Division of Emergency Government
2400 Wright St. P.O. Box 7865
Madison, WI 53707
(608) 242-3232

Wyoming (8)
Wyoming Emergency Management Agency
P.O. Box 1709
Cheyenne, WY 82003
(307)777-7566

Vulnerability Analysis Chart

TYPE OF EMERGENCY	Probability (High 5 ↔ 1 Low)	Human Impact (High Impact 5 ↔ 1 Low Impact)	Property Impact	Business Impact	Internal Resources (Weak Resources 5 ↔ 1 Strong Resources)	External Resources	Total

The lower the score the better



District of Columbia Business and Industry Emergency Management Plan

September 2002

I. Introduction

In the past, the private sector has often been given secondary consideration by government agencies when preparing for emergencies. Yet, it is clearly important that businesses have internal plans in place that will ensure their continued operation during and after emergencies take place. It is equally important that they have an emergency plan that ensures close coordination with local response agencies. It is through this coordination that businesses and industries will stay informed of emergency operations occurring at the local level, and will be able to keep their employees informed and ready to take protective actions for their safety when emergencies occur.

The District of Columbia Emergency Management Agency (DCEMA) recognizes the importance of emergency planning among businesses and industries of all sizes, and that a strong public-private sector partnership is vital to an effective community-wide emergency management program. The ***District of Columbia Business and Industry Emergency Management Plan (BIEMP)*** serves as a key component in the development of a public-private partnership by providing an emergency preparedness conduit between the private sector and the public sector. By following the structure of the DCEMA District Response Plan (DRP), the BIEMP provides businesses and industry with an understanding of important emergency management concepts and how local emergency response efforts will be conducted. In addition to serving as a coordination tool and guidebook on local emergency response, the BIEMP also serves as a model for the District's private sector organizations of all sizes to follow in developing their own emergency plans.

The BIEMP is designed to provide private sector employers and employees with an *understanding of their roles* before, during and after emergencies. The plan addresses concerns for emergencies, both internal to companies and community-wide. The BIEMP is designed to focus on the *safety of private sector employees and the protection of property* during emergencies. It is also designed to ensure that businesses and industries *experience minimal economic loss* by employing effective business continuity practices. The plan is structured to be *consistent with the DRP* and, similar to the DRP, the BIEMP is an "all hazards" plan. In other words, it is designed based on general emergency management concepts that can be followed in responding to all types of emergencies. According to a vulnerability assessment of the District, there are *four major categories of hazards* that may pose a threat to the District:

- **Natural Hazards –** severe weather, hurricanes, tornadoes, flooding, or earthquakes;
- **Infrastructure Disruptions –** utility and power failures, water supply failures, critical resource shortages, or exploding manhole covers;
- **Human-caused Events and hazards –** urban fires, special events, civil disorder, or transportation accidents; and
- **Terrorist Incidents –** bomb threats, sabotage, hijacking, or armed insurrection, which threaten life or property. Biological, chemical, radiological, and explosive agents can be employed during terrorist attacks.

District of Columbia
Business and Industry Emergency Management Plan

II. How to Develop an Emergency Management Plan

A. General

The availability of resources and internal response capabilities will affect how your company prepares for and responds to an emergency. Many large organizations have highly trained emergency response teams. These teams are capable of responding to small, isolated emergency situations without assistance from outside response organizations. Other businesses rely completely on outside response agencies for virtually any type of emergency.

This section of the BIEMP includes an emergency planning framework for businesses of all sizes and for all types of emergencies. If you are a small business, some of these functions may be integrated and you may rely on one individual (e.g., owner, manager) to ensure that the various tasks discussed below are accomplished. This may involve relying on outside emergency response organizations for certain tasks.

B. Plan Development

Prior to developing an emergency management plan, there are a number of factors to consider: the size and type of operation of your business, what level or type of emergency your company is capable of responding to, and how much you are going to depend on local emergency responders. The level of sophistication and the amount of detail needed to develop your emergency plan will determine the number of steps that need to be taken in the pre-plan development phase. The diagram below identifies the steps your company should consider in developing an emergency management plan.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team | Step 2: Risk | Step 3: Plans | Step 4: Relationship | Step 5: Continuity | Step 6: Personnel | Step 7: Resources | Step 8: Protect | Step 9: Practice

Step 1: Develop Your Team

- Identify Who Will Develop the Plan - Consider forming a planning team made up of a group of individuals who represent different interests and levels within your company structure. Involving a group of provides a broader, more robust perspective on your company's risks and response capabilities. Consider individuals from the following areas:

  - Management
  - Labor/Staff
  - Human Resources
  - Environmental, Safety, and Health
  - Public Information
  - Financial and Purchasing
  - Legal

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team | Step 2: Risk | Step 3: Plans | Step 4: Relationship | Step 5: Continuity | Step 6: Personnel | Step 7: Resources | Step 8: Protect | Step 9: Practice

Step 2: Conduct a Risk Assessment

A key step in the pre-plan development phase is determining the types of hazards to which your business or industry is most vulnerable and determining the level of risk for each type of hazard. In order to determine risk, an assessment of the vulnerability of your facility should be conducted identifying the probability and potential impact of each hazard. Following are the categories of factors that should be considered

Historical

Review the types of emergencies that have occurred in the community, at your business or industry facility and at other business/industries in the area. Consider the following types of hazards:

- Fires
- Hazardous Materials Releases/Spills
- Hurricanes
- Floods
- Tornadoes
- Winter Storms/Severe Weather
- Terrorism/Criminal Acts
- Transportation Incidents
- Utility outages
- Other emergencies

Geographical

The location of your business or industry facility may contribute to its vulnerability. Consider the following:

- Proximity to flood plains and dams
- Proximity to manufacturing plants that produce, store, use, or transport hazardous materials
- Proximity to major transportation routes and airports
- Proximity to facilities identified as primary targets for terrorism
- Proximity to high crime rate areas

Technological

The type of operation of your business may present certain risks especially your business contains or relies heavily upon technological systems that, if subject to failure, could generate hazardous consequences. Following are technological hazards that should be considered:

- Fire, explosion, or hazardous materials incident
- Safety system failure
- Telecommunications failure
- Information systems failure

- Electrical/natural gas power failure
- Emergency notification system failure
- Heating or cooling system failure

Human Error

Emergencies that result from employee error can result from the following:

- Insufficient training
- Poor maintenance
- Carelessness
- Misconduct
- Substance abuse
- Fatigue

Physical Layout

The physical design or layout of your businesses' facility may be a factor in determining your risk. Consider the following:

- The physical construction of the facility
- Layout of the equipment
- Lighting
- Evacuation routes and exits
- Proximity of shelter areas

Analysis

After you have reviewed the different possibilities for hazards that may impact your business or industry, analyze each potential emergency from beginning to end. Consider what could happen as a result of:

- Prohibited access to the facility
- Loss of power utilities (electric or natural gas)
- Structural damage
- Ruptured gas or water main
- Water damage
- Smoke damage
- Communications lines down
- Loss or damage to information systems
- Air or water contamination
- Explosion
- Trapped person
- Chemical release

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Identify Risks

Consider your findings from the vulnerability analysis and determine the types of hazards that apply to your business. Then take the following steps:

- List the types of hazards that may directly or indirectly affect your facility or business.
- Break the list down to identify those hazards that are most likely to impact your facility or business.
- Analyze human impact.
  - Consider the possibility of death or injury.
- Assess the property impact.
  - Consider the potential for property losses and damages.
  - Consider costs to replace, set up temporary replacements, or repair.
- Assess the potential business impact.
  - Business interruption.
  - Employees unable to report to work.
  - Customers unable to reach facility.
  - Company in violation of contractual agreements.
  - Imposition of fines and penalties or legal costs.
  - Interruption of critical supplies.
  - Interruption of product distribution.

Determine Planning and Resource Priorities

Risk assessment is key in the plan development process. By identifying the hazards that present the most significant risks to your facility in terms of human, property, and business impacts, you will be able to make informed decisions to determine your company's planning and resource priorities.

Determining risks not only identifies areas of emphasis that can be addressed in the plan or through SOPs, it also identifies deficiencies that can be addressed through training or through mutual aid or contractual agreements.

Mitigating Risk

For the purposes of this document, mitigation refers to the measures that businesses and industries can take to reduce the losses and risks threatened by an emergency. Companies should consider the impact that emergencies can have on their employees, their property, and their business operation. You can identify measures to reduce the chances of certain emergencies occurring, and/or you can reduce the severity of their impact when they do occur.

The results of your company's risk identification and assessment serve as the basis for determining the areas on which your business should focus its risk mitigation efforts. The risks that are determined to be the most likely to occur, with the highest

potential for severe consequences, should be addressed first. In addressing these risks, your company should determine additional controls or measures that could be used to significantly reduce the risks identified. The goal in selecting these controls or measures is to reduce the level of risk to an acceptable level with a minimum effect on other company operations or capabilities. While complete elimination of the risk is unlikely, substantial reduction of the risk is achievable.

Risk mitigation measures come in many forms and can range from implementing very simple procedures, such as rearranging items in a room, to physically relocating an entire facility. The fact that risk mitigation can be costly is another reason for companies to prioritize their risks based on the most likely and severe risks. In addition to using the risk assessment results to identify the highest and most dangerous risks to your company, they can also be used to rank all risks identified. You can then weigh the risk against the cost of implementing mitigation measures (and the cost of failing to implement) to determine the feasibility.

Following are some common examples of risk mitigation measures that a company may implement.

- Structural
  - Installing storm shutters for all exterior windows and doors
  - "Floodproofing" facilities by constructing flood walls
  - Installing fire sprinkler systems
  - Records Preservation
    - Labeling vital records
    - Storing data off-site where they would not likely be damaged
    - Backing up computer systems

- Non-Structural
  - Installation of fire-resistant materials and furnishing
  - Securing items likely to fall or shake loose
  - Moving heavy or breakable objects to low shelves
  - Anchoring water heaters and bolting them to wall studs
  - Installing curtains or blinds to be drawn over windows to prevent shattered glass from injuring employees

Frequently, the most cost-effective mitigation measures occur before events, and especially during pre-construction or pre-occupation stages. Careful consideration to the risks posed by the business site itself can result in prudent selection of site location, building materials, architectural design, furnishings and fixtures. Work with structural engineers, architects, and the District's building and zoning officials to make the smart choices, which will protect you from property damage, business interruption, and physical danger.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Step 3: Review Existing Company Plans and Procedures

Prior to developing the emergency management plan, your business should consider its current responsibilities, capabilities, and resources by reviewing existing plans and procedures, company policies, and regulations addressing emergency and environmental issues. Examples of some of the documents that should be reviewed include:

- Occupational safety and health regulations
- Facility evacuation plans
- Fire protection plan/fire codes
- Hazardous materials response plans
- Environmental regulations/policies
- Business continuity plans
- Existing Standard Operating Procedures for emergencies

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationships
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Step 4: Establish Community Relationships

Businesses and industries should make an effort to communicate regularly and share emergency information with outside response agencies, neighboring businesses, and the surrounding community to determine their roles and responsibilities in preparing for and responding to emergencies.

- Coordination with local emergency response agencies – The DCEMA and other local emergency response agencies can assist businesses in developing their emergency management plans. Once the plan has been developed, it is important that the business/industry-government responder relationship be maintained to ensure that emergency operations are coordinated effectively.
- Coordination with other businesses – Businesses and industries should work with neighboring businesses and industries to identify areas where they may be able to assist each other during emergencies. They may consider establishing a formal mutual aid agreement or memorandum of agreement that identifies specific resources and/or situations where assistance can be provided.
- Coordination with community groups and the public – Outreach to private citizens through community groups such as Local Emergency Planning Committees or through company-sponsored events such as facility tours are important to engage the surrounding community in your company's planning process. Establishing a relationship with the public during the plan development phase and maintaining that relationship through regular communication will help to build their confidence and buy in to your company's emergency management plan and policies.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationships
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Step 5: Plan for Business Continuity

The goal of business continuity planning is to maintain and/or restore critical resources whose damage, in the event of a disaster, might disable any functional area or essential equipment supporting the systems or functions. This section discusses primary services and critical systems, and provides a general description of each. The purpose of this section is to provide the reader with a basic understanding of these services and functions and to provide a context against which preparedness activities can be introduced. Listed below are examples of tables that detail the critical systems and functions.

Critical Systems and Primary Services Provided

These systems and services should be defined at a level of detail that allows meaningful analysis of the hazards and identification of contingency options. You should begin by providing a summary of the core business functions, recipients of these services/functions, the maximum allowable days of service interruption, and the criticality of each service and the decision maker.
Following are examples of core business functions and critical systems essential to the operation of a company:

Core Business Functions

Service Description	Recipients	Maximum Allowable Disruption (Days)	Criticality	Point of Contact
Reimburse Vendors				
Maintain Database				
Process invoices				
Issue checks				
General Operations				
Maintenance Support				
Hot-line				
Help desk				

Critical Systems/Resources			
Critical System	Business Function	Primary Location	Secondary Location
Facilities			
Communication			
Security			
Network System			
Other Resources			

Vendor and Customer Notification

List only the key customers and critical vendors, those who would need and expect personal notification. Being pro-active in contacting important vendors and customers so that they can be informed of an emergency situation within your company and prepare for the potential business impact it may have on them can go a long way in mitigating losses. The department and teams that are the primary direct contacts with vendors or clients should complete this form.

Critical Vendor List		
Vendor Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Comments:		

List only vendors that you would be responsible for contacting.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Key Customer List		
Customer Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Comments:		

Other Business Partners or Support Providers

When an incident occurs, you may need to contact some organizations that do not fall into one of the earlier categories. You should create a list of any of those additional entities too. Some of those entities include:

- Emergency response agencies such as police, fire, utility companies, and the American Red Cross (if your community uses the 911 system, that should be documented).
- Business Partners (internal and external) that are neither Vendors nor Customers. These could include internal business units who rely on your business unit for information, your management, and internal business units that would support your recovery. Examples include corporate insurance, internal security, facilities, public relations, and human resources.

The information needed to contact these entities is the same as for Vendors or Key Customers.

Business Partners/Support Providers List		
Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Comments:		

Property Protection

Protecting your property, resources and records is essential to ensuring that facility operations can be restored in a timely manner following an emergency. Establish procedures for:

- Closing or barricading doors and windows
- Shutting down equipment
- Covering or securing equipment
- Moving equipment to a safe location (if an alternate facility is established as described in the next section, you may want to move critical equipment, resources and records to that location)

Be prepared in the event that a facility shutdown is warranted. Designate personnel to authorize, supervise and perform a facility shutdown. Develop and post SOPs on your shutdown procedure and ensure that appropriate personnel are fully trained to include a clear understanding of when to abandon the shutdown effort. Identify:

- The conditions that could necessitate a shutdown
- Who will conduct the shutdown
- The effects of a partial shutdown on other facility operations
- How long it takes to shutdown and restart facility operations

You may want to consider installing systems to detect abnormal situations that provide warning and help to protect your property. Some of these considerations may include:

- Fire protection systems
- Lightning protection systems
- Water-level monitoring systems
- Overflow detection device

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

- Automatic shutoffs
- Emergency power generation systems

Your property insurer should be able to assist you with more information on the above systems and other special protective systems.

Secondary Facility

Select a secondary location to meet in case your facility is unavailable. Make sure key people know the location and have maps if necessary. This pre-defined meeting place will serve as a location for you and your key staff to plan your response to the incident.

In choosing this meeting place, think about any key resources you would need there and consider its location. Some of the resource and location considerations are:

- Location: When selecting an alternate business work place you should consider a location relatively close to your normal work place and near the key staff members' homes. The location should not be so far away that staff members would have difficulty getting there. Conversely, it should not be so close to your normal work location that it could be affected by the same incident.
- Vulnerabilities: When selecting a location for your meeting place, especially for your secondary location, be sure to consider the types of vulnerabilities you have.
- Communications Capability: Because the ability to communicate with others is essential to effectively respond to any incident, make sure that the location you choose has enough telephones for your needs. If you have a cellular phone, you should plan to take it with you to this meeting place as another means of communication, and in the case landline phones are not working.
- Network Capability: If you have a portable/laptop computer with Internet or e-mail capabilities, your meeting place should have the capability to connect that computer as well.
- Size of the Facility: The location you choose should be big enough for the number of people that expect to congregate there. This is not an alternate place for your staff to work, though, only a place for you and your key staff to discuss your plan of action in response to the event and to manage your recovery efforts. Therefore, it does not need to be so large that your entire staff can work there if your facility is affected. The alternate work location can be addressed later when your complete Business Continuity Plan is documented.

Potential Secondary Location facilities include:

- Another company facility
- Hotel
- Convention Center
- Other Public Facility, example a library.

When documenting your secondary location, you should include its name, street address, who to contact to gain access, and any security requirements. Ensure that a map to the location and a floor plan of the facility are available if this information is not familiar to the staff.

Secondary Location Profile		
Facility Name:		
Product/Service:		
Street Address:		
City/State/Zip:		
Contact Person:		
Phone No.:		
24 Hour No.:		
FAX No.:		
Alternate Contact:		
Security Considerations:		

Continuity of Management

Following a disaster, you may find that some of your key personnel are not available when important recovery decisions must be made quickly. To be prepared for such situations consider the following:

- Chain of command – Identify who is authorized to make different types of decisions and ensure that clearly defined lines of succession for each decision-making position are in place.
- Legal Considerations – Consult your legal department regarding laws and corporate bylaws governing continuity of management.
- Develop SOPs defining your continuity of management/decision making process and ensure that employees are familiar with them.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Insurance

Before a disaster occurs contact your insurance agent to determine your individual needs. Waiting until after a disaster has happened can have devastating financial consequences on your business. Unfortunately, most companies discover that they are not properly insured only after the have suffered a loss. Following are some of the important issues that you should discuss with your insurance carrier:

- Your property's value
- Amount of insurance required to avoid becoming a co-insurer
- Causes of loss covered by your policy
- Your deductibles and their amount
- What your policy requires you to do in the event of a loss
- The types of records and documentation that your insurance company will require from you and if the records are stored safely
- The extent of your coverage for loss due to power interruption both on and off your company's premises
- The extent of your coverage for lost income due to business interruption and how long that coverage may be provided.
- The extent of your coverage for reduced income due to customers' not all immediately coming back once your business reopens.
- How your emergency management program will affect your rates.

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Step 6: Assign Personnel

Depending on the size and emergency management capabilities of your business or industry, this section, which defines the individuals and system for your emergency management operations, will vary greatly.

The following are elements that should go into this section of your plan:

- Designation of a Facility Emergency Management Coordinator – The Facility Emergency Management Coordinator (FEMC) is the individual in charge of conducting emergency operations. Designating an Emergency Management Coordinator and identifying a clear chain of command, eliminates employee confusion regarding who has authority for making decisions during an emergency.
  - The FEMC should be in charge of command and control issues regarding all aspects of the emergency.
    - Depending on the size and capabilities of the organization, there may be an "emergency management team"; however, one facility coordinator should be designated as in charge with alternate backup. During an emergency, the FEMC, with the assistance of the emergency management team, is responsible for the "big picture" and controls all incident related activities.
    - Some facilities may use the Incident Command System (ICS) during emergencies. ICS can be applied where an Incident Commander oversees the technical aspects of emergency response and coordinates closely with the facility emergency coordinator.
- Personnel Management – In selecting personnel to fill emergency roles, consider individuals with decision-making authority who have expertise in the following areas: Security, Safety and Health, Environmental, Maintenance, Human Resources, Public Relations, and Planning and Logistics, then:
  - Assign personnel to specific emergency preparedness and response roles based on their areas of expertise.
  - Develop standard operating procedures (SOPs) for each position and prepare checklists that summarize the procedures that can be used as quick references.
  - Ensure that all personnel with emergency responsibilities have capable backup and that a clear line of succession is identified for key positions.
  - Ensure that all personnel including backup personnel are adequately trained for their positions.
  - Ensure that all personnel are familiar with how to recognize and report an emergency, warn co-workers, facility security and safety measures, and evacuation procedures.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Step 7: Identify Resources

Ensure that adequate resources and facilities are available to effectively respond to emergencies:

- Identify resources, equipment, and supply needs for each response function.
- Identify and designate a location to serve as the Emergency Operations Center (EOC).
  - The EOC is the location within the facility from which emergency operations should be coordinated by the facility emergency coordinator. The EOC can be a particular desk, office, cubicle or area, or in larger facilities a multi-purpose conference or training room.
  - Regardless of size or process, every business/industry should designate an EOC where decision makers can gather during an emergency.
  - Emergency SOPs, communications equipment, and activity logs should be housed in the EOC in an obvious and easily accessible location.

Communications

Businesses and industries of all sizes should consider the functions that they might need to perform in an emergency and the communications systems needed to support them. Consideration should be given to all types of communication directed to the following:

- Employees and their families
- Internal and outside emergency response teams
- Neighboring businesses
- Private citizens
- Business customers
- Media
- Notification

Establish procedures for employees to report an emergency and train employees on procedures. In addition, establish procedures for making notification to government agencies.

- Identify individual(s) who will make the notification.
- Ensure that all federal/state/local notification requirements for emergencies are followed. DCEMA can assist you with determining these notification requirements.
- Prepare announcements that could be made over the public address system to notify employees of emergencies.

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Warning System

- Establish a system for warning personnel of an emergency that is clearly audible/visible and within view and earshot of all facility employees.
  - Ensure that an auxiliary power supply is in place to provide for backup warning.
    - Have a distinct and recognizable signal that has been exercised.
    - Have plans for warning persons with disabilities.
    - Exercise and train staff on warning procedures.
    - Establish procedures for warning customers, and other non-employees who may be on premises.
    - Conduct regular tests of the warning system at least monthly.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Step 8: Protect Your Employees

Protecting the life and safety of everyone at your business or industry is the first priority during an emergency. Procedures must be in place to ensure facility staff are aware of hazards that are or may be threatening them. Additionally, all personnel must be trained to respond effectively to emergencies. All factors, including emergency procedures, the design of the facility, and available resources must provide staff with the means to take appropriate protective actions when necessary.

- Evacuation Planning

  A facility evacuation can vary from one that is initiated due to an occurrence within the facility such as a fire or hazardous materials incident to a community-wide evacuation that may occur for a hurricane. When developing evacuation procedures, consider the following:

  - The conditions under which an evacuation would be necessary for each potential hazard.
  - Establish a clear chain of command. Identify personnel with the authority to order an evacuation.
  - Designate individuals for specific functions while evacuation is underway, including assisting others in an evacuation, accounting of personnel, and shutting down critical operations.
  - Establish procedures for assisting persons with disabilities and those who do not speak English.
  - Ensure that evacuation procedures are posted in locations clearly accessible by employees.
  - Identify assembly area(s) where personnel should gather and ensure that employees are aware of the designated area(s).
  - Consider employee transportation needs for community-wide evacuations.
  - Coordinate plans with the DCEMA.
  - Train, exercise, and test your plans on a periodic basis.

- Evacuation Routes and Exits

  The following practices should be followed when designating primary and secondary evacuation routes:

  - Ensure that all routes are clearly marked and illuminated by emergency lighting.
  - Evacuation routes and exits must be wide enough to accommodate the number of evacuating people, unobstructed at all times, and unlikely to expose evacuating personnel to additional hazards.
  - Outside organizations should be requested to evaluate the feasibility of designated evacuation routes.

- Sheltering

Emergencies may necessitate that staff seek shelter within the facility until the threat passes. The following issues should be considered when developing sheltering procedures:

- The hazards and conditions that would require staff to seek shelter within the facility
- Identify specific locations within the facility that could serve as shelter space for each hazard that occurs in the facility or in the community.
- Determine the need for emergency supplies such as water, food communications, and medical equipment.
- Designate shelter managers, if appropriate.
- Coordinate shelter procedures with DCEMA.

District of Columbia
Business and Industry Emergency Management Plan

Step 1: Team
Step 2: Risk
Step 3: Plans
Step 4: Relationship
Step 5: Continuity
Step 6: Personnel
Step 7: Resources
Step 8: Protect
Step 9: Practice

Step 9: Practice Your Plan

Training should be conducted on a regular basis for everyone who works at or visits your facility. Individuals must be familiar with the emergency plan including their roles and responsibilities as well as procedures for such things as notification and evacuation. Following are basic considerations for developing a training program:

- Determine how frequently training should be conducted (it is recommended that you conduct formal training for all new employees and at least every 12 months for other employees)
- Identify who will conduct the training and where the training will take place
- Identify what types of training activities will be used. Consider the following:
  - Classroom Instruction – Regularly scheduled orientation and education sessions to provide information, generate discussion, answer questions and identify needs and concerns.
  - Tabletop Exercise – Key emergency management team members discuss how they would respond to certain emergency scenarios.
  - Walk-through Drill – The emergency management team and others with emergency roles actually perform their emergency response functions based on a given scenario.
  - Functional Exercise – These drills are designed to test specific functions such as emergency notification, warning and communications procedures and equipment. A functional exercise may focus on one or two key areas or may cover multiple emergency functions.
- Determine how you will document and evaluate the effectiveness of the training

Invite community emergency responders from the DCEMA, police department and local fire department, to assist you in developing, conducting and evaluating your training program.

ACC 2006 Annual Meeting

Program 808: Business Continuity Planning for and Recovering from Disasters

Resources list for "Insurance Considerations in Business Continuity Planning and Disaster Recoveries"

Articles

"Looking at the Events of September 11: Some Effects and Implications" by John W. Stamper, Defence Law Journal, April, 2002 at page 152

"Twin Towers: The 3.6 Billion Question Arising from the World Trade Centre Attacks" by Michael F. Aylward, Defence Law Journal, April, 2002 at page 169

"Basics of Business Interruption Insurance: The Ins and Outs of Tricky Coverage" by Paul M. Hummer, Defence Law Journal, July 2002 at page 307

"The August 2003 Blackout and Insurance Coverage for Power Outage Losses" by Scott J. Johnson and Amy M. Churan, 39 Tort Trial & Insurance Practice Law Journal at pg 813, ABA

"Recent Developments in Property Insurance Law" by K. Clark Schirle, Francis J. Maloney III, Maria A. Vathis, and Linda M. Bolduan, 40 Tort Trial & Insurance Practice Law Journal at pg 753, ABA

"Recent Developments in Excess Insurance, Surplus Lines Insurance, and Reinsurance Law" by Thomas B. Orlando, Rick H. Cavaliere, Leslie J. Davis, Michael J. Steinlage, and Deborah Russo, 40 Tort Trial & Insurance Practice Law Journal at pg 397, ABA

"The Insurance Aftermath of September 11 : Myriad Claims, Multiple Lines, Arguments Over Occurrence Counting , War Risk Exclusions, The Future of Terrorism Coverage, and New Issues of Government Role" by Jeffrey W. Stemple, 37 Tort Trial & Insurance Practice Law Journal at pg 818, ABA

"Business Interruption Coverage : Demystifying the causation analysis" by Pamela Levin and Thomas H. Neinow, ABA Brief, Fall 1994

"Where have all the customers gone? Business Interruption Coverage for Off-Premises Events" by Paula B. Tarr, ABA Brief, Winter 2001

"Practice Tips : Time-Element Losses During Catastrophes" by Jess B. Millikan, ABA Brief, Spring 2002

"Insurance Implications of the World Trade Center Disaster" by Carl J. Pernicone and James T. H. Deaver, ABA Brief, Spring 2002

"An Ill Wind Blows No Good: The nuances of business-interruption claims" by Patricia McHugh Lambert and Jennifer L. Kleeman, Business Law Today, Vol 15, No. 4, March/April 2006

Text Book

Business Interruption Insurance, Second Edition, Canada Law Book, 2006, authors John Seigal and Bruce Webster, PricewaterhouseCoopers LLP and Sean Gosnell, Borden Ladner Gervais LLP

Some ACC Resources

ACC InfoPAKS

Developing Effective Disaster Preparedness And Business Continuity Plans
http://www.acca.com/infopaks/disaster.html

A Policyholder's Primer on Insurance
http://www.acca.com/infopaks/insurance.html

Preparing for and Responding to an Accidental Environmental Release: A Legal Primer
http://www.acca.com/infopaks/environment.html

ACC Practices Profiles

Crisis Management and the Role of In-House Lawyers
http://www.acca.com/protected/article/crisismanage/lead_crisis.pdf

Business Continuity And Disaster Response Planning: What Companies Are Doing
http://www.acca.com/resource/v7152

ACC Articles

Kirsk Pasich, Barry Fleishman, and Randy Paar, "*An Overview of insurance Coverage For Losses From Hurricane Katrina"*
http://www.acca.com/protected/article/insurance/hurrkatrinainsvrvw.pdf

Kathy Barlow and Kirsk Pasich, Disasters & Insurance: *"Lessons for Businesses from Katrina and Rita"*
http://www.acca.com/protected/pubs/docket/feb06/barlow-feb06.pdf.

When Disaster Strikes — The Role of the General Counsel and Law Department
excerpt from "When Disaster Strikes – The Legal Department's New Imperative, ACCA 2001 Annual Meeting Materials at
http://www.acca.com/protected/reference/crisismanage/disasterchecklist.pdf

Debra Sabatini Hennelly, Vincent M. Gonzales, and Charles C. Read
"Responding to an Environmental Disaster: The First 48 Hours"
http://www.acca.com/protected/pubs/docket/ja03/disaster.pdf

006 Disaster Recovery: Preparing for the Unexpected
2005 Annual Meeting Materials
http://www.acca.com/am/05/cm/006.pdf

James W. "Jim" Patton, Terrence D. Delehanty, David C. Fannin, Diane J. Geller, Theresa M.B. Van Vliet, and Naomi J. Paiss, *"Responding to Media Inquiries in a Crisis: In-House Counsel as Spokesperson"* ACCA Docket July/Aug 2003
http://www.acca.com/protected/pubs/docket/ja03/media.pdf

Presentation for Georgetown University Law Centre Continuing Legal Education, Sixth Annual Corporate Counsel Institute (Mar 14 –15, 2002, Washington, DC) titled *"Crisis Management: the Economy, Security and Coping With the Unexpected"* by Rosemary L. O'Brien
http://www.acca.com/protected/article/crisismanage/effective.pdf

ACC Webcasts

"Maximizing Insurance Recoveries in the Aftermath of Katrina"
http://phx.corporate-ir.net/phoenix.zhtml?p=irol-eventDetails&c=129735&eventID=1134986

"**Preparing for and Responding to an Accidental Environmental Release"**
http://phx.corporate-ir.net/phoenix.zhtml?c=129735&p=irol-EventDetails&EventId=939612

"Pandemic Preparedness: Developing Your Company's Plan, Thinking Through the Legal Issues"
http://webcasts.acca.com/detail.php?id=64608&go=2

ACC Checklists

"Best Practice in Crisis Response Checklist"
http://www.acca.com/protected/reference/crisismanage/bestresponse.pdf

"Crisis Communication Planning and Tactics Checklist"
http://www.acca.com/chapters/program/houst/crisischecklist.pdf

"The Impact of Unusual Events on the Duty to Perform"
http://www.acca.com/protected/reference/crisismanage/cmcntrcts.pdf

"Crisis Management, Planning and Execution"
http://www.acca.com/protected/reference/crisismanage/cmplanningex.pdf

Some Useful Websites Relating to Business Continuity Planning and Disaster Recovery

American Red Cross
Disaster Services
http://www.redcross.org/services/disaster/0,1082,0_501_,00.html

American Society for Industrial Security
http://www.asisonline.org/

Business Continuity Institute
http://www.thebci.org/

Business Continuity Planners Association
www.bcpa.org

Business Recovery Managers Association
www.brma.com

DERA – The Disaster Preparedness and Emergency Response Association
www.disasters.org

Disaster Help Portal
https://disasterhelp.gov/portal/jhtml/index.jhtml

Disaster News
www.disasternews.net

Disaster-Resource.com
www.disaster-resource.com/cgi-bin/freeguide.cgi

Disaster Recovery Books
http://www.disasterrecoverybooks.com/

DRIE – Disaster Recovery Information Exchange
www.drie.org

DRI -- Disaster Recovery Institute Canada
www.dri.ca

DRI International – Disaster Recovery Institute International
www.drii.org

Disaster Recovery Journal
www.drj.com
- for a glossary of business continuity terms
  http://www.drj.com/glossary/drjglossary.html

International Association of Emergency Managers
http://www.iaem.com

Relief Web
http://www.reliefweb.int/rw/dbc.nsf/doc100?OpenForm
- ReliefWeb is administered by the UN Office for the Coordination of Humanitarian Affairs (OCHA),

Risk and Insurance Management Society
www.rims.org

The Natural Disaster Education Coalition
http://www.disastereducation.org/

Department of Homeland Security
http://www.dhs.gov/dhspublic/

Department of Labour
Hurricane Recovery Assistance
http://www.dol.gov/opa/hurricane-recovery.htm

FEMA
http://www.fema.gov/

National Incident Management System
http://www.fema.gov/nims/

National Weather Service
http://www.nws.noaa.gov/

Small Business Administration, Disaster Recovery
http://www.sba.gov/disaster_recov/index.html

Cert LA Home Page
http://www.cert-la.com/index.shtml

Disaster preparedness and response from Smithsonian Institution
http://palimpsest.stanford.edu/bytopic/disasters/

Emergency preparedness information exchange
http://epix.hazard.net/internet_sites.html

Insurance Information Institute
http://www.commercialinsurancefacts.org

National Association of Public Insurance Adjusters
http://www.napia.com