

SIGMA\7

RISK ENGINEERING

Emergency Organization

INTRODUCTION

An Emergency Organization is one whose members carry out specific responsibilities before, during and after an emergency, and work as a team to minimize the potential loss to a business and site. Fire is the major concern at most locations. However, other emergencies such as Earthquake, Flood, Windstorm, and Explosion need to be considered.

A properly supported and well-maintained Emergency Organization will promote a thorough understanding of the risks that expose a business and site. Responsibilities will be coordinated with the Fire Department and other external emergency service providers. The Emergency Organization will be informed about all hazardous in-house activities.

DEVELOPING AN EMERGENCY ORGANIZATION

For exceptionally large or complex risks, it is recommended that a committee be formed to oversee the planning process, to develop roles and responsibilities, determine staffing levels, and to determine related training needs. In any case, a competent individual should be assigned overall responsibility for the organization.

Initial thought is required to develop an effective Emergency Organization. The following steps are recommended:

1. Brainstorm and prioritize the likely site hazards and exposures.
2. Determine the critical mitigating loss control features for each.
3. Develop initial response strategies that can help to reduce loss.
4. Assess the response/capabilities of the Fire Department or other emergency service provider.
5. List all hazardous in-house activities to coordinate.
6. Develop salvage & recovery strategies.

From a property insurance perspective, likely exposures may include fire, explosion, windstorm, flood, earthquake, freeze, collapse, chemical spill, power outage, bomb threat, civil disturbance, labor unrest, etc. Prioritizing these exposures should consider both the severity and frequency of loss. Fire has been the largest property exposure historically and will be the top priority if any combustible occupancy or construction exists.

A thorough knowledge of the key loss control features is critical to developing Emergency Organization responsibilities that will enhance the reliability of those features. Features include: automatic fire protection, fire walls & doors, flood walls & doors, automatic shutoffs, automatic interlocks, purge systems, venting systems, etc. Review any existing inspection, maintenance and testing programs or outstanding insurance company recommendations to uncover all weaknesses.

For fires, initial response usually involves combating the fire with portable extinguishers or fire hose. Also, pursue efforts to reducing the potential for water and/or smoke damage. Cover stock, remove

combustibles, de-energize electrical equipment, shut down ventilation systems, etc. For windstorm, secure yard storage, inspect roof flashing, and board over exposed windows. For collapse resulting from heavy rains or snowfall, remove snow manually, inspect roof drains, etc. For earthquakes, shut off gas supplies and water lines to reduce the potential for explosion and water damage respectively. Make every effort not to compromise automatic sprinklers if they are still functional. For floods, implement a sandbagging operation, raise or relocate stock & equipment, de-energize equipment, etc. For freeze, obtain temporary heaters, and drain water from piping to avoid breakage.

Coordinate a pre-fire plan with the local Fire Department. This is a critical step for determining appropriate manpower, assigning key roles and responsibilities, and for determining training needs for the Emergency Organization members. Some basic points are outlined below:

- ❑ Conduct a site tour with the Fire Department
- ❑ Discuss the following topics in detail:
 - Site specific exposures (hazards, occupant loads, etc.)
 - Combustible construction.
 - Automatic fire protection features (also discuss unprotected areas, and areas where protection is known to be deficient).
 - Fire protection water supplies (discuss sources, piping, valves, and fire department connections)
 - Other emergency systems (fire alarm, ventilation, purging, etc.)
 - Critical shutoffs for flammable or combustible liquids and gases
 - Firewalls and fire doors
 - Critical utilities
 - Access routes
- ❑ Develop a site plan, include the above information, and share it with the Fire Department.
- ❑ Coordinate a plan to have a knowledgeable Emergency Organization member (Person in Charge) meet the fire department at the site entrance, guide them to the affected area, and assist as directed.
- ❑ Coordinate what actions will be taken by the Plant Emergency Organization upon discovery of fire, and decide what responsibilities they will have once the fire department arrives on site (e.g. valve supervision, starting fire pumps, shutting off utilities, etc.).
- ❑ Provide the Fire Department with basic instructions regarding the operation of critical emergency systems and utilities unless the Emergency Organization will be responsible.
- ❑ Discuss when it is appropriate to shut off sprinkler systems. A sprinkler system should not be shut-off if it is operating properly until the emergency official in charge has determined that the fire has been extinguished.

Provisions should be made to keep the Emergency Organization advised of all hazardous in-house activities. These activities include hot work, fire system impairments, new construction projects, major repairs, significant process or occupancy changes, etc.

Develop salvage & recovery strategies to minimize property damage and business interruption. Coordinate these efforts with any corporate or local business continuity plan that is in place. Concentrate on expediting clean up (decontamination, dehumidification, repackaging, etc.) and restoration of utilities. Manage fire protection impairments and control ignition sources, especially Hot Work. Plan to supply customers from other locations. Relocate manufacturing operations to unaffected locations. Increase production hours to make up lost production. Arrange for purchase of any critical stock & supplies or equipment to maintain production. Develop detailed disaster recovery plans for important computer operations. Maintain good internal & external contact information to support any plans that are developed. Develop a procedure for effectively communicating with customers, employees, and the media. Coordinate efforts with purchasing and other departments within the organization.

KEY RESPONSIBILITIES

For a typical Emergency Organization assign the following roles with primary and alternates assigned to each shift. Roles can be assigned to individuals or to specific job functions.

Person in Charge – This member will have a thorough understanding of all aspects of the Emergency Organization, will direct the activities of the members, and will work closely with the Fire Department to coordinate activities and exchange knowledge.

The Notifier – This member contacts the public fire department and other emergency organization members to notify them of an emergency. They maintain an updated contact list that is available at all times.

The Sprinkler Control Valve Operator - This member will be responsible for ensuring that the affected valves remains open during a fire. They should remain at the valve, if safe to do so, until it is ordered closed by the Person in Charge or the emergency official.

The Fire Pump Operator - This member checks the fire pump to ensure that it has started automatically, and starts it manually if it has not. They should remain at the pump, keeping it operational, until the Person in Charge or the emergency official orders it shut down.

The Fire Squad - These members are trained to fight incipient stage fires until the Fire Department arrives.

The Plumber - This member will shut off supplies of flammable liquids, gasses, and other hazardous materials as directed by the Person in Charge.

The Electrician - This member will shut off electrical service as directed by the Person in Charge or emergency official. This could also include shutdown of fans, ventilation or HVAC systems depending on the circumstances. This member could also be called on to establish temporary power and/or lighting in the event that primary power is lost.

The Salvage Squad - These members will expedite immediate salvage and business recovery operations to ensure that property damage and business interruption is minimized. They should notify insurance adjusters promptly through the proper channels.

PERIODIC REVIEW

Review the following items annually:

- ☐ Incident response history.
- ☐ Insurance Company survey report.
- ☐ Site changes.
- ☐ Member turnover.
- ☐ Member training needs.
- ☐ Fire Department pre-plan.

Training should be dependent on member qualifications and site hazards and should be evaluated on a case by case basis. Basic fire extinguisher training should be provided to the Fire Squad members as a minimum requirement. These members need to know where fire extinguishers are located and how to use them, as well as being knowledgeable about which type of extinguisher will work for different types of fires.

Fire drills should be conducted periodically to increase awareness and to measure training and responsiveness.

SAMPLE EMERGENCY ORGANIZATION ROSTER

The following can be used as a sample template for developing your Emergency Organization.

Emergency Organization Roster				
Company:		Address:		
Responsible Manager:		Effective Date:		
Duties		Shifts		
		1	2	3
Person in Charge	<i>Regular</i>			
	<i>Alternate</i>			
The Notifier	<i>Regular</i>			
	<i>Alternate</i>			
The Sprinkler Control Valve Operator	<i>Regular</i>			
	<i>Alternate</i>			
The Fire Pump Operator	<i>Regular</i>			
	<i>Alternate</i>			
The Fire Squad	<i>Regular</i>			
	<i>Alternate</i>			
The Pipe Fitter	<i>Regular</i>			
	<i>Alternate</i>			
The Electrician	<i>Regular</i>			
	<i>Alternate</i>			
The Salvage Squad	<i>Regular</i>			
	<i>Alternate</i>			