



Organizational and Safety Solutions

Emergency Action Planning and Evacuation Drills (Emergency Evacuation Plans)

Background

Emergency action plans are tools that allow businesses to plan “what to do” in the event of an emergency. These plans can help minimize losses to employees, equipment and facilities if developed and implemented prior to the emergency.

The OSHA standard 29 CFR1910.38 requires that employers develop Emergency Action Plans (EAP) to address fires and other emergencies. The standard requires that a **written** plan be developed for every jobsite that has 10 or more employees. If there are less than 10 employees, the plan may be developed and disseminated orally.

Other emergencies for which EAP’s may be needed include: natural disasters (hurricanes, tornados, earthquakes, flooding), chemical spills, workplace violence, terrorism, or accidental release of toxic gases.

A hazard survey should be conducted at each facility that identifies all exposures. Your EAP should address all hazards identified in the survey.

EAP Requirements

1. **Emergency Evacuation Procedures and Routes:** A map of the workplace should be drawn that identifies a primary and secondary escape route from each area of the workplace. The escape route should lead employees along the quickest path out of the building or to a safe zone located within the building **without passing through a higher hazard location**. For example, an assembly-line employee should not be directed to evacuate through a paint storage room.

Additional evacuation aids such as lights or directional arrows may be installed to assist employees with the evacuation. Evacuation routes may be color coded or numbered. These codes may reflect primary and secondary routes or codes can be established when the exposure requires a different route (for example, fire escape routes may be different from tornado escape routes). When there are multiple escape routes used, a coded alarm or voice announcement should be given to notify employees what route to use.

Special procedures should be developed for helping disabled or physically impaired employees or guests. This may include special systems for signaling the evacuation or assigning an employee to assist the impaired person or guest with the evacuation.

Your facility may have several types of evacuation. These may include total evacuation, partial evacuation, or evacuations to different areas of the building or property depending upon the emergency causing the evacuation. The EAP should address what type of evacuation is required for each hazard. The EAP should also establish the roles of employees and supervisors during the emergency.

Evacuation Wardens are employees who are designated to help facilitate the evacuation. In most cases, supervisors or management will act as the evacuation wardens. The wardens will assist with the evacuation and usually perform a check in their designated areas prior to leaving to ensure no one is left behind.

Total Evacuations are just what the name implies. This is an evacuation that moves all people out of the building or structure into the safe area.

Partial Evacuations are used when it is impractical to evacuate the entire structure. This is usually used in large or high rise buildings. For example, the fire area or fire floor is the actual location of the fire. People located in these areas are evacuated to other safe areas within the building. For example, in high rises, floors above the fire floor are generally evacuated to higher floors; floors below the fire floor are evacuated to lower floors. The property owner needs to coordinate with the local fire marshal to determine if their preference is to “defend in place,” meaning that individuals not in immediate harm remain where they are. An example of this may be a residential structure where fire doors, compartmentalized construction, and fire suppression systems make staying in place a safer strategy than evacuating.

Exterior Refuge Areas are safe locations outside and away from the building. Assembly points should be located in the Exterior Refuge Areas. Employee evacuation training should teach employees to seek these areas as quickly as possible. Employees must move away from Exits and congregate in areas away from the building and the exits to allow other employees to exit quickly and to allow emergency professionals access to the building.

2. **Reporting Emergencies:** Reporting emergencies will vary depending upon the type of emergency and the equipment located on site. Commonly used equipment for reporting emergencies includes alarm pull stations or keypads, telephone, intercom, public address systems, and radios. In developing a reporting procedure, review the equipment that is available and determine the best solution.

The preferred reporting method should be posted in common and conspicuous areas. Employee bulletin boards can be good locations for posting reporting procedures. When the telephone systems are used, post emergency numbers on all phones or install “speed dial” numbers in the phone system. When an intercom or PA system is used for reporting emergencies, the emergency reporting must have priority over all other addresses.

All employees must be notified of the emergency and the need to act by an alarm. Audible alarms must have sufficient volume to be heard above the ambient noises. When visual alarms are used, they must be visible above normal light levels. The alarm signal (audible or visual) must be distinctive and easily recognizable. A contingency to anticipate is the emergency being concurrent with a power failure. Will your alarm function under that circumstance? If not, a common compressed air horn, as used for many sporting events, can be an effective means of communication.

The alarm signal should be given in plenty of time for employees to complete the appropriate actions. These may include: fighting incipient stage fires, following the evacuation path, or any other emergency management tasks assigned by management.

Employees should be trained on the evacuation procedures, routes, rally points, alarms, and alerts. These should be drilled regularly.

3. **Procedures for Employees Who Remain Behind for Critical Operations:** Sometimes employees are required to remain in the facility during emergency alarms. This generally occurs when businesses have operations that cannot cease for every emergency alarm or there are special shut down procedures that are required to minimize losses. When employees are required to remain behind, employers should develop specialty evacuation plans for these positions and make every effort to place these positions in the most secure areas possible.
4. **Accounting to Ensure all Employees / Guests are Out of the Facility:** A specific plan to account for all employees and guests in the facility must be developed. Generally, employees and guests are required to assemble at predetermined rally points. At the rally point, a head count may be completed. Grabbing time cards on the way out may be a simple means of determining employees' onsite. A visitor sign-in book also helps determine what guests may have been inside.

Security measures should be written into the plan to address unauthorized access to the facility during the alarm. Additional security measures should be implemented for protecting important papers and other company assets.

5. **Rescue and Medical Duties:** In the planning stage, it should be determined what rescue and medical activities will be provided by company employees and what outside sources will be used. When outside resources are exclusively used, each service should be identified and a plan of how and when to contact these services should be developed. The names, contact information and duties of all company employees who will manage and perform medical and rescue duties must be included in the plan. Certifications for first aid, CPR, and automatic external defibrillator use usually have renewal dates that should be monitored.

6. **Names or Regular Job Titles of Persons or Departments that can be Contacted for Further Information or Explanations of Duties Under the Plan:** The plan must establish a chain of command for handling emergency situations. The person (or persons) responsible for maintaining, implementing and training employees about the plan should be documented within the plan. Employees should have access to the plan and be able to discuss concerns or questions about the plan with managers. Safety committees can provide input to the on-going development and refinement of the program.

Training Requirements

EAP should be reviewed with each employee at the following times:

1. When the plan (or a new plan) is implemented
2. When a new employee is hired
3. Whenever the plan or actions within the plan change.

EAP drills should be conducted at least annually (please check with the Authority Having Jurisdiction, e.g., Fire Marshal or Emergency Coordinator in your area, as the local requirements may be more stringent. Retraining or reinforcement of policy and procedure may be needed if poor performance is noted during drills or if lack of knowledge of the EAP is noted in discussions with employees.

If you have any questions or would like additional information, please contact your local PMA Risk Control Consultant.

IMPORTANT NOTICE - *The information and suggestions presented by PMA Companies in this risk control technical bulletin are for your consideration in your loss prevention efforts. They are not intended to be complete or definitive in identifying all hazards associated with your business, preventing workplace accidents, or complying with any safety related or other laws or regulations. You are encouraged to alter the information and suggestions to fit the specific hazards of your business and to have your legal counsel review all of your plans and company policies.*

