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*Your Workplace Safety Partner*

## EMERGENCY ACTION PLANS

### **Minimum Elements of an Emergency Action Plan**

An emergency action plan must be in writing, kept in the workplace, and available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees. Furthermore, the plan must include the following elements at a minimum.

1. Procedures for reporting a fire or other emergency;
  - a. What to do upon discovery (pull alarm, notify supervisor, run, etc.)
  - b. Persons/establishments to notify Internally and externally
  - c. Communications Equipment
  - d. Procedures for Reporting the Emergency
  - e. Phone Numbers, Radio Frequencies, etc.
  
2. Procedures for emergency evacuation, including type of evacuation and exit route assignments;
  - a. Plan view layout of facility
  - b. Egress Routes directed from Hazardous Areas
  - c. Egress Route Termination
  - d. Assembly Areas
  - e. Potential Obstructions
  - f. Fire Extinguishers
  - g. Pull Stations
  - h. First Aid Stations
  - i. AED's
  - j. Tornado Shelters
  - k. Stairwells
  - l. Chemical/Waste Storage
  - m. Elevators
  - n. Eye Wash Stations
  
3. Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;
  - a. Listing of all Critical Operations
  - b. Listing of Persons Responsible
  - c. Length of Time
  - d. Procedures for Reporting
  - e. Training Requirements
  
4. Procedures to account for all employees after evacuation;
  - a. How do you account for employees/visitors
  - b. Responsible Persons
  - c. Assembly Areas
  - d. Requirements to Account and Report
  - e. Means to Account for Critical Operations
  - f. Searchers

5. Procedures to be followed by employees performing rescue or medical duties
  - a. List Personnel with First Aid/CPR Duties
  - b. Training Requirements
  - c. Qualified Persons Responsibilities
  - d. Procedures for Communicating with First Aid/CPR Persons
  
6. The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.
  - a. Listing of Primary and Alternate Personnel
  - b. Phone Numbers, Radio Frequencies, etc.
  - c. Continually Updated
  
7. Other Elements to include
  - a. Emergency / Evacuation Alarm System
  - b. EAP Training Requirements
  - c. Fire Prevention Plan (1910.39)
  - d. House Keeping
  - e. Procedures for the Review and Update of the Plan
  - f. Mutual Aid Agreements

**Other Types of Emergency Plans to Develop**

Emergencies can be caused by many different factors; natural means, technological failures or human events/errors. Performing a vulnerability analysis to determine what other types of Emergency Action Plans you might need is a good idea.

Vulnerability Analysis Worksheet									
Emergency/Event	Probability		Human Impact	Business Impact	Property Impact	Preparedness		Total	Notes
	High (5) -----> Low (1)		High (5) -----> Low (1)			Internal	External		
						Weak (5) -----> Strong (1)			
Tornad Hits Facility	2		4	4	5	3	3	38	
Loss of Power	3		3	4	2	2	2	39	
Flood	1		4	4	4	5	5	22	
Workplace Violence	3		4	3	1	2	2	36	
								0	
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Probability x (Human Impact + Business Impact + Property Impact) + (Internal Preparedness + External Preparedness) = Total Vulnerability									

Develop a Hazards List and determine the probability of occurrence and the potential impact in your business and this may lead you to developing additional plans. Some other types of emergencies you may want to plan for are:

- Severe Weather
- Hazardous Material
- Utility Interruption
- Workplace Violence
- Bomb Threat/Terrorism
- Medical Emergency
- Other

### **Training**

An employer must designate and train employees to assist in a safe and orderly evacuation of other employees. Types of training activities should include all of the following:

- Orientation and Education
- Tabletop Exercises
- Walk Through Drill
- Functional Drill
- Actual Evacuation Drill
- Full Scale Drill(Simulation)

### **Review of Emergency Action Plan**

An employer must review the emergency action plan with each employee covered by the plan:

1. When the plan is developed or the employee is assigned initially to a job;
2. When the employee's responsibilities under the plan change; and
3. When the plan is changed.

### **The “Weakest Links” to an Effective Emergency Action Plan**

- Plans out of date
- Language barriers
- Notification system
- Accounting for visitors/contractors
- Special needs

## 1910.39 FIRE PREVENTION PLAN SUMMARY

### **Minimum Elements of a Fire Prevention Plan**

A fire prevention plan must be in writing, be kept in the workplace, and be made available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees. A fire prevention plan must include:

1. A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard;
2. Procedures to control accumulations of flammable and combustible waste materials;
3. Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials;
4. The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires; and
5. The name or job title of employees responsible for the control of fuel source hazards.

### **Employee Information**

An employer must inform employees upon initial assignment to a job of the fire hazards to which they are exposed. An employer must also review with each employee those parts of the fire prevention plan necessary for self-protection.

**EXIT ROUTES, EMERGENCY ACTION PLANS, AND FIRE PREVENTION PLANS. –  
1910 SUBPART E APPENDIX**

1. "Emergency action plan elements." The emergency action plan should address emergencies that the employer may reasonably expect in the workplace. Examples are: fire; toxic chemical releases; hurricanes; tornadoes; blizzards; floods; and others. The elements of the emergency action plan presented in paragraph 1910.38(c) can be supplemented by the following to more effectively achieve employee safety and health in an emergency. The employer should list in detail the procedures to be taken by those employees who have been selected to remain behind to care for essential plant operations until their evacuation becomes absolutely necessary. Essential plant operations may include the monitoring of plant power supplies, water supplies, and other essential services which cannot be shut down for every emergency alarm. Essential plant operations may also include chemical or manufacturing processes which must be shut down in stages or steps where certain employees must be present to assure that safe shut down procedures are completed.

The use of floor plans or workplace maps which clearly show the emergency escape routes should be included in the emergency action plan. Color coding will aid employees in determining their route assignments.

The employer should also develop and explain in detail what rescue and medical first aid duties are to be performed and by whom. All employees are to be told what actions they are to take in these emergency situations that the employer anticipates may occur in the workplace.

2. "Emergency evacuation." At the time of an emergency, employees should know what type of evacuation is necessary and what their role is in carrying out the plan. In some cases where the emergency is very grave, total and immediate evacuation of all employees is necessary. In other emergencies, a partial evacuation of nonessential employees with a delayed evacuation of others may be necessary for continued plant operation. In some cases, only those employees in the immediate area of the fire may be expected to evacuate or move to a safe area such as when a local application fire suppression system discharge employee alarm is sounded. Employees must be sure that they know what is expected of them in all such emergency possibilities which have been planned in order to provide assurance of their safety from fire or other emergency.

The designation of refuge or safe areas for evacuation should be determined and identified in the plan. In a building divided into fire zones by fire walls, the refuge area may still be within the same building but in a different zone from where the emergency occurs.

Exterior refuge or safe areas may include parking lots, open fields or streets which are located away from the site of the emergency and which provide sufficient space to accommodate the employees. Employees should be instructed to move away from the exit discharge doors of the building, and to avoid congregating close to the building where they may hamper emergency operations.

3. "Emergency action plan training." The employer should assure that an adequate number of employees are available at all times during working hours to act as evacuation wardens so that

employees can be swiftly moved from the danger location to the safe areas. Generally, one warden for each twenty employees in the workplace should be able to provide adequate guidance and instruction at the time of a fire emergency. The employees selected or who volunteer to serve as wardens should be trained in the complete workplace layout and the various alternative escape routes from the workplace. All wardens and fellow employees should be made aware of handicapped employees who may need extra assistance, such as using the buddy system, and of hazardous areas to be avoided during emergencies. Before leaving, wardens should check rooms and other enclosed spaces in the workplace for employees who may be trapped or otherwise unable to evacuate the area.

After the desired degree of evacuation is completed, the wardens should be able to account for or otherwise verify that all employees are in the safe areas.

In buildings with several places of employment, employers are encouraged to coordinate their plans with the other employers in the building. A building-wide or standardized plan for the whole building is acceptable provided that the employers inform their respective employees of their duties and responsibilities under the plan. The standardized plan need not be kept by each employer in the multi-employer building, provided there is an accessible location within the building where the plan can be reviewed by affected employees. When multi-employer building-wide plans are not feasible, employers should coordinate their plans with the other employers within the building to assure that conflicts and confusion are avoided during times of emergencies. In multi-story buildings where more than one employer is on a single floor, it is essential that these employers coordinate their plans with each other to avoid conflicts and confusion.

Before implementing the emergency action plan, the employer must designate and train enough people to assist in the safe and orderly emergency evacuation of employees [29 CFR 1910.38(e)]. Employers should review the plan with each employee when the initial plan is developed and when each employee is initially assigned to the job [29 CFR 1910.38(f)(1)]. Employers should review the plan with each employee when his/her actions or responsibilities under the plan change [29 CFR 1910.38(f)(2)], or when the plan changes [29 CFR 1910.38(f)(3)]. Effective plans often call for retraining employees annually and include drills in which employees can practice evacuating their workplace and gathering in the assembly area.

Educate your employees about the types of emergencies that may occur and train them in the proper course of action. The size of your workplace and workforce, processes used, materials handled, and the availability of onsite or outside resources will determine your training requirements. Be sure all employees understand the function and elements of your emergency action plan, including types of potential emergencies, reporting procedures, alarm systems, evacuation plans, and shutdown procedures. Discuss any special hazards you may have onsite such as flammable materials, toxic chemicals, radioactive sources, or water-reactive substances. An employer must inform employees of the fire hazards to which they are exposed and review with each employee those parts of the fire prevention plan necessary for self-protection [29 CFR 1910.39(d)].

Clearly communicate to your employees who will be in charge during an emergency to minimize confusion.

General training for your employees should also address the following:

- Individual roles and responsibilities;
- 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; and
- Emergency shutdown procedures.

And remember, if training is not reinforced it will be forgotten. Consider retraining employees annually.

You also may want to train your employees in first-aid procedures, including protection against bloodborne pathogens; respiratory protection, including use of an escape-only respirator; and methods for preventing unauthorized access to the site.

Once you have reviewed your emergency action plan with your employees and everyone has had the proper training, it is a good idea to hold practice drills as often as necessary to keep employees prepared. Include outside resources such as fire and police departments when possible. After each drill, gather management and employees to evaluate the effectiveness of the drill. Identify the strengths and weaknesses of your plan and work to improve it.

4. "Fire prevention housekeeping." The standard calls for the control of accumulations of flammable and combustible waste materials.

It is the intent of this standard to assure that hazardous accumulations of combustible waste materials are controlled so that a fast developing fire, rapid spread of toxic smoke, or an explosion will not occur. This does not necessarily mean that each room has to be swept each day. Employers and employees should be aware of the hazardous properties of materials in their workplaces, and the degree of hazard each poses. Certainly oil soaked rags have to be treated differently than general paper trash in office areas. However, large accumulations of waste paper or corrugated boxes, etc., can pose a significant fire hazard. Accumulations of materials which can cause large fires or generate dense smoke that are easily ignited or may start from spontaneous combustion, are the types of materials with which this standard is concerned. Such combustible materials may be easily ignited by matches, welder's sparks, cigarettes and similar low level energy ignition sources.

5. "Maintenance of equipment under the fire prevention plan." Certain equipment is often installed in workplaces to control heat sources or to detect fuel leaks. An example is a temperature limit switch often found on deep-fat food fryers found in restaurants. There may be similar switches for high temperature dip tanks, or flame failure and flashback arrester devices on furnaces and similar heat producing equipment. If these devices are not properly maintained

or if they become inoperative, a definite fire hazard exists. Again employees and supervisors should be aware of the specific type of control devices on equipment involved with combustible materials in the workplace and should make sure, through periodic inspection or testing, that these controls are operable. Manufacturers' recommendations should be followed to assure proper maintenance procedures.

Thank you for the opportunity to provide you with this Emergency Action and Fire Prevention Planning guideline. If you would like more information or would like us to create these plans for your facility do not hesitate to contact us. If you already have these written plans in place and would like a third part entity to review their effectiveness and completeness, we also provide cost effective consulting services.

**To find out more about our services please contact us today to see how we can help!**

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