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## **Chapter 8 : DISASTER & EMERGENCY PREPAREDNESS**

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### ***INTRODUCTION/OVERVIEW***

No one likes to think about disasters. We tend to think they won't happen to us. But the truth is that disasters do happen -- often when we least expect them. It's important that each one of us takes the time now, before a disaster or emergency strikes, to familiarize ourselves with the policies and procedures to follow in the event of an emergency. How we respond to the challenges presented by an emergency situation could mean the difference between life and death, not just for us personally, but for many others as well.

Disasters are of two basic types: internal and external. Fire and severe weather conditions are examples of internal disasters. Civil disturbance and airplane crashes are examples of external disasters.

We in the construction industry frequently must cope with disasters such as fire, electrical power loss, severe weather conditions and bomb threats. Over the years we've learned that inadequate egress provisions are often responsible for more deaths and injuries than the original emergency.

This chapter presents a thorough summary of the basic requirements essential to implementing an emergency action/prevention plan. Using the guidelines and the additional reference material provided, **CUNNINGHAM PAVING** must prepare a plan for all offices and shop facilities.

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## EMPLOYEE EMERGENCY PLANS AND FIRE PREVENTION PLANS - 1910.38

This section applies to all emergency actions plans and fire prevention plans required by a particular OSHA standard.

### **EMERGENCY ACTION PLAN**

#### **BASIC ELEMENTS**

The emergency action plan must be in writing, except for employers with 10 or fewer employees, in which case the plan may be communicated to employees orally. The plan must include the following elements at a minimum.

1. Escape procedures and escape route assignments.
2. Critical operations shutdown procedures.
3. Procedures to account for all personnel.
4. Rescue and medical duties assignments.
5. Means of reporting fires and emergencies.
6. Identification of responsible persons for further information.

The emergency action plan should address all potential emergencies that can be expected in the workplace. Therefore, it will be necessary to conduct a hazard audit to identify potentially toxic materials and unsafe conditions. For information on chemicals, the manufacturer or supplier can be contacted to obtain Material Safety Data Sheets. These forms describe the hazards that a chemical may present, list precautions to take when handling, storing, or using the substance, and outline emergency and first-aid procedures to follow when required.

The employer should include detailed procedures to be implemented by those employees who must remain behind to care for essential operations until such time as their evacuation becomes absolutely necessary. This may include monitoring power supplies, water supplies, and other essential services that cannot be shut down each time there is an emergency alarm.

The plan must include floor plans or workplace maps that clearly identify emergency escape routes and safe or refuge areas that are to be used in case of emergency evacuation. All employees must be told what actions they are to take in the emergency situations that may occur in the workplace.

This plan should be reviewed with employees regularly: 1) initially when the plan is developed; 2) whenever the employees' responsibilities under the plan change; and 3) whenever the plan is changed.

#### **ALARM SYSTEM**

Employers shall establish an employee alarm system that complies with 1910.165. Alarms should be audible or seen by all people at the jobsite and should have an auxiliary power supply in the event electricity is affected. The alarm should be distinctive and recognizable as a signal to evacuate the work area or perform actions designated under the emergency action plan.

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## EVACUATION

In the emergency action plan, the employer shall establish the types of evacuation to be used in emergency circumstances. 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, when the emergency is very grave, total and immediate evacuation of all employees is necessary. In other emergencies, a partial evacuation of non-essential employees, with a delayed evacuation of others, may be necessary for continued 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.

The employer's emergency action plan should ensure 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 through use of the buddy system. They should also be alerted to the location of hazardous areas that are 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.

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 firewalls, the refuge area may still be within the same building but in a different zone from where the emergency occurs.

