

Emergency Procedures

The Risk

An Emergency Action Plan (EAP) is best described as a specific plan for emergencies, taking into account the specific worksite layout, structural features, risk and emergency response systems. Emergencies can include Medical, Weather, Chemical, or Smoke / Fire and Explosion. In the pellet industry special attention should be given to the actions needed for the adequate response to wood dust fire and explosion.

Not having an adequate plan could lead to panic and poor response during an emergency. Lack of planning could also leave workers unaccounted for and create increased exposures for responders.

The Controls

EAPs should include the following critical components:

- The means of reporting a fire or emergency.
- The evacuation procedures and assembly areas.
- The procedures for those who remain to operate critical plan functions and operations in the event of an emergency.
- Accounting of employees.
- Rescue and medical duties.
- Names and job titles of key positions.
- Although it is not required, best practices also identify a description of alarm types for various emergencies and a testing frequency.

Means of Reporting

The procedures for reporting a fire or emergency should be well documented and practiced. Best practices including conducting of periodic drills of the reporting processes. There are preferred procedures specific to each plant site, such as dialing 911 or an internal emergency number, pulling a fire alarm, or reporting to a central location via radio communications. It is a best practice to identify the means of reporting and post it at every phone.

Evacuation Procedures and Assembly Areas

Evacuation policies, procedures, and escape route assignments are put into place so that employees understand who is authorized to order an evacuation, under what conditions an evacuation would be necessary, how to evacuate, and what routes to take during an evacuation. Exit diagrams are typically used to identify the escape routes to be followed by employees from each specific facility location.

Evacuation procedures also often describe actions employees should take before and while evacuating such as turning off equipment, and closing areas behind them.

In the pellet industry a fire is the most common type of emergency for which the industry must plan. A critical decision when planning is whether or not employees should fight a small fire with a portable fire extinguisher or simply evacuate. Small fires can often be put out quickly by a well-trained employee with a portable fire extinguisher. However, to do this safely, the employee must understand the use and limitation of a portable fire extinguisher and the hazards associated with fighting fires, such as the risk of a dust cloud leading to a dust fire and explosion. Evacuation plans that designate or require some or all of the employees to fight fires with portable fire extinguishers increase the level of complexity of the plan and the level of training that must be provided employees.

When a lack of area resources are available plants should give consideration to an onsite Industrial Fire Brigade vs. Incipient Teams. Onsite Fire Brigades increase the level of complexity and require more levels of planning. Considerations should include physical demands, medical exams, pulmonary function tests, and quarterly drills. For more information see **OSHA 1910.156**.

Procedures for Critical Operations

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In the pellet industry it is often necessary for equipment and processes must be shut down in stages or over time. When a systematic shut down is required it is best to designate which employees will remain behind briefly to shut down gas and/or electrical systems. These individuals should be identified and accounted for.

Each plant should review their operation and determine whether total and immediate evacuation is possible for the various types of emergencies or if stages are required.

If any employees will stay behind, the plan must describe in detail the procedures to be followed by these employees. All employees remaining behind must be capable of recognizing when to abandon the operation or task and evacuate themselves before their path of evacuation is blocked. It is best to include in your plan locations where utilities (such as electrical and gas) can be shut down for all or part of the facility either by your own employees or by emergency response personnel.

Accounting for Employees

To ensure the fastest, most accurate accountability of your employees, you may want to consider including these steps in your emergency action plan:

- Designate assembly areas or areas, both inside and outside your workplace, where employees should gather after evacuating. Assembly locations within the building are often referred to as “areas of refuge.” Make sure your assembly area has sufficient space to accommodate all of your employees. Exterior assembly areas, used when the building must be partially or completely evacuated, are typically located in parking lots or other open areas away from busy streets. Try and designate assembly areas so that you will be up-wind of your building from the most common or prevailing wind direction.
- Take a head count after the evacuation. Identify the names and last known locations of anyone not accounted for and pass them to the official in charge. Accounting for all employees following an evacuation is critical. Confusion in the assembly areas can lead to delays in rescuing anyone trapped in the building, or unnecessary and dangerous search-and-rescue operations. When designating an assembly area, consider (and try to minimize) the possibility of employees interfering with 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 offsite location.

Pre-plan with local Emergency Management Agencies

As a best practice plants should provide an overview and tour of the plant site for local Fire Departments and First Responders. During the review assembly areas, fire connections, incident command posts, and flammable storage areas should be communicated.

Applicable Standards and Additional Information

OSHA Standards for Emergency Plans can be found at **OSHA CFR 1910.38**. Insurance carriers often provide templates and assistance with the development of EAP's.

Disclaimer

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