

# OSHA Safety and Health Regulations Related to SPF Applications

## Module One: Pre-Work Safety Program

### Handouts and Quiz



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# Module One: Pre-Work Safety Program

OSHA believes that there are five key elements in an organizations safety program:

- Management Leadership
- Employee Involvement
- Worksite Analysis
- Hazard Prevention and Control
- Training

## Management Leadership and Employee Involvement

Management must take the lead in initiating safety standards for its employees and the employees must do their part by following the rules set by management. But employee involvement goes beyond that. An effective safety program features active employee participation in its development and ongoing improvement.

## Worksite Analysis

Prior to performing a task for the first time, the employer must conduct a Job Hazard Analysis (JHA). This initial analysis identifies potential hazards, hazard avoidance strategies, required personal protective equipment, required safety and technical training and standard operating procedures. This initial Job Hazard Analysis is critical to performing the task in a safely.

After the initial Job Hazard Analysis, a scheduled worksite analysis is recommended. Commonly referred to as a “safety inspection” this site analysis is very helpful in identifying problems before they cause an injury. A formal safety inspection should be performed at the start of each job and at the start of each new workday onsite.

## Hazard Prevention and Control

Controlling and preventing hazards can be accomplished by following OSHA’s “Hierarchy of Control”. This formula suggests that we first try to eliminate the hazard through the use of Engineering Controls. Engineering Controls are those things that we do to a specific piece of equipment or tool to make them safer. For instance a machine might include a safety guard that protects the employee from moving parts. Engineering Controls are the preferred means of protecting the worker.

The next means of protection in the hierarchy of control is Administrative Controls. Administrative Controls deal with people and processes. For instance training employees in workplace safety is considered an Administrative Control. Although effective, Administrative Controls do have their limitations. Issues such as an employee’s ability to remember the training they received can have an impact on the usefulness of Administrative Controls. When possible, so not simply rely on Administrative Controls to protect employees. Administrative Controls work best when used to supplement Engineering Controls.

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The final means of employee protection is Personal Protective Equipment (PPE). PPE in the Spray Polyurethane Foam industry might include respirators, protective suits, nitrile gloves and similar items.

PPE is a very useful and often necessary means of protection; however it does have its limitations. An employee who is provided PPE but neglects to wear it negates the benefit of this solution. In another example, an employee may use PPE but it's not the proper type of PPE for the given task (dust mask versus supplied air respirator). For these reasons, PPE is a last means of protection and must always be coupled with Engineering Controls and/or Administrative Controls.

#### Engineering Controls:

- Guards
- Barriers
- Design Features

#### Administrative Controls:

- Employee Training
- Standard Operating Procedures
- Confined Space Permit

#### Personal Protective Equipment:

- Protective Clothing
- Respirator
- Safety Glasses



## **Training**

Of course training of the workforce is critical to a successful safety program. All employees working with SPF products including helpers need specific task and hazard related training. Be sure to keep good records of who was trained, what was covered and when the training occurred.

Training of non-employees is suggested and might include orientation training for all contractors.

## Quiz - Module One: Pre-Work Safety Program

**1. Which of the following activities are not considered a key element of a successful safety program?**

- a. Management leadership and employee involvement
- b. Training
- c. Having a physical fitness program for employees
- d. Hazard prevention and control

**2. Prior to performing a task for the first time, what safety related step must be taken?**

- a. Complete a Job Hazard Analysis (JHA)
- b. Apply for proper building permit
- c. Elect a safety committee
- d. Contact the local OSHA office

**3. The Hierarchy of Control includes (in the proper order):**

- a. Respiratory Protection, Recordkeeping and Training
- b. Engineering Controls, Administrative Controls and Personal Protective Equipment
- c. Personal Protective Control, Training and Machine Guards
- d. Personal Protective Equipment, Administrative Controls and Engineering Controls

**4. An Administrative Control might include:**

- a. The use of a supplied air respirator instead of a filtering facepiece
- b. A hardhat that meets ANSI standards
- c. A safety switch on a motor control
- d. Standard Operating Procedures

- 5. Employees have no responsibility when it comes to workplace safety.**
- a. True
  - b. False
- 6. An air purifying respirator is acceptable for SPF application in an attic space?**
- a. True
  - b. False
- 7. An example of an Engineering Control is:**
- a. Having a Professional Engineer on the safety committee
  - b. Design and construction documents
  - c. Supplied air respirator
  - d. Machine guarding
- 8. The Safety Inspection only needs to be preformed prior to the initial start of the job.**
- a. True
  - b. False
- 9. Personal Protective Equipment is the preferred means of employee protection.**
- a. True
  - b. False
- 10. Which of the following is not an acceptable means of Personal Protective Equipment?**
- a. Nitrile gloves
  - b. Respiratory protection
  - c. Cut-off shorts
  - d. Protective footwear

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# Answer Sheet for Quiz - Module One: Pre-Work Safety Program

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