



Introduction to Chemical Manufacturing

Safety on the job



Course Objectives

1. Describe the employee's responsibilities for maintaining a safe workplace.
2. Describe the company's responsibility for maintaining a safe workplace.
3. List typical engineering controls and describe their function in workplace safety.
4. List typical administrative controls and describe their function in workplace safety.
5. Describe the types of personal protective equipment and the hazards they address.



Key Terms (Define the following)

engineering controls - _____

administrative controls - _____

ventilation - _____

dilution - _____

isolation - _____

substitution - _____

safe work permit - _____

lockout/tagout - _____

hot work - _____

confined space - _____

personal protective equipment (PPE) - _____

air-purifying respirator - _____

air-supplying respirator - _____

self contained breathing apparatus (SCBA) - _____



Questions

1. List three ways that an employee can maintain a safe work environment.

1) _____

2) _____

3) _____

2. List three ways the company creates and maintains a safe work environment.

1) _____

2) _____

3) _____

3. Give an example of when exhaust ventilation may be used.

4. A heating and air conditioning system is an example of _____ ventilation.

5. List two examples of the use of isolation or enclosure to reduce exposure to noise, heat, chemical release, or other hazard.

1) _____

2) _____

6. The use of a robotic sprayer rather than exposing a worker to the paint fumes is an example of which engineering control?

7. Give an example of where a guard may be used to avoid a pinching or crushing hazard.

8. With a work permit, who is responsible for ensuring safety?

9. The purpose of the _____ system is to isolate a piece of equipment from an energy source including electrical, compressed air, hydraulic, or other source.

10. List three hazards in a confined work space.

- 1) _____
- 2) _____
- 3) _____

11. List three examples of administrative controls that ensure a safe workplace.

- 1) _____
- 2) _____
- 3) _____

12. List the features of a chemical protective suit.

- 1) _____
- 2) _____
- 3) _____