



## GOALS

### This safety session teaches employees to:

- Understand their role as first responders and the site's emergency response plan.
- Recognize a hazardous release and potential outcomes.
- Report hazardous chemical releases effectively and secure the area.

### Applicable Regulations: 29 CFR 1910.120



#### 1. Recognize releases of hazardous chemicals.

- In some cases, recognizing a chemical release can be simple. For example:
  - You might see liquid dripping from a pipe, pump, or a tank.
  - Liquid might be pooling on the ground around a drum or in the containment of a tank farm.
- In other cases, you might detect only an unusual smell.
  - This can often be the first sign of a chemical release and may be cause for further investigation until a visual confirmation can be made of the chemical release.
  - Depending on the chemicals used in your workplace, a smell alone may be enough to warrant the initiation of the emergency response plan and evacuation procedures.
- Another way to detect a chemical release includes hearing an unusual sound such as a hissing sound (releasing gas) or a dripping sound (releasing liquid).
- If instruments show a loss of pressure or flow in a system, this could also be an indication of a chemical release.
- Depending on the chemical, even a small release or spill can be very dangerous.
- Make the effort to identify the material and where it is coming from only if it is safe to do so.
  - Look for labels, signs, or placards on the chemical container, drum, tank, or pipe.

#### 2. Evaluate site conditions.

- If you determine that there is a release of hazardous chemicals, evacuate the area and ensure that coworkers also evacuate.
- As you evacuate, try to evaluate the site conditions around the spill and pass this information on to the incident commander and the emergency response team.
- Look for vapor clouds from the chemical release.
  - When evacuating the area, move in the opposite direction of a vapor cloud and upwind of a chemical release.
- Smoke could indicate there is also a fire related to the release.
  - When evacuating, move away from smoke.
- Look for any injured persons who will need to be rescued by the emergency response team.



- Consider surrounding home and work populations, since they may need to be evacuated.
- Identify the direction in which smoke or vapor is blowing or the direction in which liquids are flowing.
- Identify potential environmental damage such as contaminated soil, contaminated stormwater, or pollution of waterways.

### 3. Report all releases immediately.

- Contact your facility's emergency response team by following the procedures outlined in the emergency response plan.
- Provide information to the emergency response coordinator, including the name(s) of the chemical(s) involved in the release.
- Describe the location of release, how chemicals were released, and provide an estimate of the quantity of released material.
- Describe site conditions such as fire, fumes, and smoke.
- Describe whether the area has been evacuated and if there are victims of the release that will need rescue or emergency medical treatment.
- Request additional resources if necessary, and ask for instructions until help arrives.

### 4. Secure the area and await the arrival of the response team.

- Once you have reported the spill or release to the response personnel, secure the area around the release to keep unauthorized personnel out.
- Use caution tape, rope, cones, and barricades to create a safe zone around the area.
  - Your emergency response plan might call for the use of specific equipment; however, you may be required to barricade with whatever is available.
- As soon as the emergency response team arrives, they will take over the release site and contain and clean up the spill.
  - Provide the team leader with any updated information about the release as well as any information about employees who need help.



#### DISCUSSION POINTS:

Review your site's emergency response plan and make sure trainees understand procedures and their role in emergency operations.



#### CONCLUSION:

- Your prompt and proper response to hazardous releases is vital to safety.
- Any release of hazardous chemicals may create a dangerous situation. Make sure you know how to respond effectively in the event of a spill—small or large—so that you can contribute to the effort to contain the release and prevent injuries and damage.



#### TEST YOUR KNOWLEDGE:

Have your employees take the HAZWOPER First Responder quiz. By testing their knowledge, you can judge their ability to respond to hazardous material emergencies and whether they need to review this important topic again soon.



**HAZWOPER FIRST RESPONDER QUIZ**

1. Which of these are ways you might detect a release of hazardous chemicals?
  - a. Sight
  - b. Smell
  - c. Both a and b
2. Only big releases of hazardous chemicals are dangerous.
  - a. True
  - b. False
3. To identify a chemical involved in a release, look for labels, signs, and placards.
  - a. True
  - b. False
4. If there's a release, stay right at the scene of the release to evaluate conditions until the emergency response team arrives.
  - a. True
  - b. False
5. Report only large releases, not small spills.
  - a. True
  - b. False
6. When reporting releases:
  - a. Identify the chemical involved.
  - b. Describe the location of the release.
  - c. Both a and b.
7. When reporting a release, describe site conditions such as fire and fumes.
  - a. True
  - b. False
8. It is not necessary to physically secure the site of a release (for example, with tape or cones).
  - a. True
  - b. False
9. If smoke or vapor is released, try to identify the direction in which it is blowing.
  - a. True
  - b. False
10. Evacuating the site of a release is only necessary if there is a fire.
  - a. True
  - b. False

When you have completed this quiz, turn it in to your supervisor.

Name: \_\_\_\_\_

Date: \_\_\_\_\_



## ANSWERS TO HAZWOPER FIRST RESPONDER QUIZ

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1. c. Both of these are ways to detect a release. You might also hear hissing or dripping sounds, or instruments might indicate the possibility of a release.
2. b. False. Depending on the type of chemical, even a small release could be dangerous. Treat all releases seriously, and follow site procedures for handling them.
3. a. True. Make the effort to identify the chemical if it is safe to do so.
4. b. False. Evacuate to a safe distance from the release. Evaluate site conditions as you are evacuating, if possible.
5. b. False. Report all releases to the emergency response coordinator and the response team.
6. c. Also describe how the chemical was released, the amount of chemical released, and whether anybody was hurt.
7. a. True. Give the emergency response team as much information about the release as possible when reporting a spill.
8. b. False. Physically secure the site of a release to keep unauthorized people out.
9. a. True. And if liquids are released, try to determine the direction of flow and report that information.
10. b. False. Evacuate the scene of any hazardous chemical release, making sure other employees evacuate as well. The emergency response team will take care of containing and cleaning up the spill.