# Confined Space Precautions

# A SAFETY TALK FOR DISCUSSION LEADERS

This safety talk is designed for discussion leaders to use in preparing safety meetings.

Set a specific time and date for your safety meeting. Publicize your meeting so everyone involved will be sure to attend.

Review this safety talk before the meeting and become familiar with its content. Make notes about the points made in this talk that pertain to your workplace. You should be able to present the material in your own words and lead the discussion without reading it.

Seating space is not absolutely necessary, but arrangements should be made so that those attending can easily see and hear the presentation.

Collect whatever materials and props you will need ahead of time. Try to use equipment in your workplace to demonstrate your points.

#### DURING THE MEETING

Give the safety talk in your own words. Use the printed talk merely as a guide.

The purpose of a safety meeting is to initiate discussion of safety problems and provide solutions to those problems. Encourage employees to discuss hazards or potential hazards the encounter on the job. Ask them to suggest ways to improve safety in their area.

Don't let the meeting turn into a gripe session about unrelated topics. As discussion leader, its your job to make sure the topic is safety. Discussing other topics wastes time and can ruin the effectiveness of your safety meeting.

At the end of the meeting, ask employees to sign a sheet on the back of this talk as a record that they attended the safety meeting. Keep this talk on file for your records.

### Confined Space Precautions

Special caution must be taken when working in a closed, unventilated area. By using the proper personal protective equipment and taking precautions, you help assure that the working environment is hazard-free.

However, under no circumstances, enter a sewer, manhole, underground chamber, conduit or any other confined space without first taking the proper safety precautions.

Think before you enter a confined space. People have died because they didn't.

## Follow these procedures:

- Don't enter a confined space if you can perform the job from the outside.
- Open doors or remove covers and air out the area as long as possible.
- Blank-out inlet and outlet lines whenever possible; lock all valves in the closed position and turn all switches off to be sure that the area is closed off as much as possible.
- Blow air, steam or both into the space to be entered or exhaust the air in the confined space in some way.
- Test for combustible gas, oxygen deficient atmospheres (carbon dioxide), carbon monoxide and other suspected gases, including methane, hydrogen sulfide and nitrogen.
- Always put on a harness and lifeline (with standby personnel attached to the persons inside). Continue to test the air while entering the confined space. If oxygen in the air is less than 19 percent, anyone who breathes it without a respirator could become unconscious.
- All electrical equipment must be explosion-proof.
- If the atmosphere is dangerous, wear an approved air line or selfcontained breathing apparatus.
- Whenever the confined space is re-entered, check conditions again.
  Keep records of the test results and all persons who entered the area.

Most of what we have discussed so far relates to respirators; however, some conditions require complete body protection because some gases or vapors, such as hydrogen cyanide, can be absorbed through the skin.

Never forget that a chamber that is safe one day may be deadly the next time you enter it. This is because when there is a rapidly falling barometer, indicating decreasing atmospheric pressure, oxygen could be replaced in the chamber by another agent, such as carbon dioxide.

Before entering a sewer or confined pit, ask yourself these questions. Your life could depend on it.

- Has organic matter used up all of the oxygen?
- Has fermentation produced suffocating carbon dioxide?
- Has decomposition created an explosive mixture?
- Has a chemical reaction created dangerous hydrogen sulfide, carbon monoxide or other toxic substances?