

MAJOR PROGRAM POINTS

"CONFINED SPACE ENTRY... A REFRESHER PROGRAM"

**Training for THE OSHA
PERMIT-REQUIRED CONFINED SPACES STANDARD**

Quality Safety and Health Products, for Today...and Tomorrow

OUTLINE OF MAJOR PROGRAM POINTS

The following outline summarizes the major points of information presented in the videotape program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- **Confined Spaces can be deadly if we are not careful.**
 - Long drops.
 - Tight crawlspaces.
 - Pipes and odd fittings to maneuver around.
 - Hazardous atmospheres.
 - Too much or too little oxygen.

- **Because of the dangers many Confined Spaces pose, OSHA created the Permit-Required Confined Space Regulation.**
 - Designed to help cut down on injuries and fatalities.

- **The Regulation addresses a number of issues, including:**
 - Personal Protective Equipment needed for Confined Space work.
 - Using tripods, safety lines and harnesses.
 - When to use forced air ventilation.
 - Air monitoring and testing.

- **All facilities that have employees entering potentially hazardous Confined Spaces must set up a "Written Permit Space Entry Program".**
 - Under the program, each space is examined.
 - If potential dangers are found in the space a Written Entry Permit is required in order to enter the space.

- **The Written Entry Permit lists important information about the space, including:**
 - It's location.
 - Purpose of the entry that is being performed.
 - Date and duration of the entry.
 - Names of the Entry Supervisor and other personnel.

- **Other information that must appear on the Permit includes:**
 - Acceptable entry conditions.
 - Dates, times and results of atmospheric testing.
 - Potential hazards within the space.
 - Hazard isolation procedures (such as lock-outs).
 - Rescue information (such as needed emergency equipment and phone numbers of rescue groups).

- **When working with "sparking" equipment, such as a welders torch or grinder, a "Hot Work Permit" is needed.**
 - In addition to the normal Entry Permit.

- **Prior to entering a Confined Space, the duties of each member of the "Entry Team" must be defined.**
 - Entry Supervisor.
 - Attendant.
 - Entrants.

- **Entry Supervisors have a number of responsibilities.**
 - Oversees the entry process.
 - Makes sure personnel are trained.
 - Verifies that initial atmospheric testing has been done.
 - Fills out, date and sign necessary paperwork.
 - Keeps other personnel/employees clear of the Confined Space during entry.

- **The Entry Supervisor must also see that required safety equipment is on hand.**
 - Body Harness.
 - Tripod and Winch.
 - Safety Lines.
 - Air Monitoring Devices.
 - Communication Systems.
 - Alarms.
 - Personal Protective Equipment.

- **The Attendant monitors all entry activity from the outside.**
 - Must be ready to act if a problem arises.
 - Are trained for entry.
 - Knows the contents of the Entry Permit.
 - Tests air prior to and during all entries.
 - Keeps in communication with personnel inside the space.
 - Sets up "forced air ventilation" as needed.

- **Although Attendants must normally stay outside the space, there are special situations when they may enter.**
 - These situations are specified under the Entry Permit.

- **The Entrants are the last members of the Entry Team.**
 - Trained to safely enter and exit a Confined Space.
 - Must wear a harness with retrieval line when entering.
 - Must know when forced air ventilation is required.
 - Must also know when to use explosion-proof lighting.

- **Atmospheric testing of any potentially hazardous space is extremely important.**
 - Must be performed by qualified personnel.
 - Using direct reading, calibrated instruments.

- **Three tests must be performed, in specific order.**
 - Oxygen Content.
 - Flammable Gases and Vapors.
 - Toxic Contaminants.

- **"Oxygen Content" is the first test.**
 - If oxygen is less than 19.5% of the atmosphere, there is not enough to breath.
 - If content is above 23.5%, chances of a fire or explosion are increased substantially.

- **The second test measures for Flammables/Explosives Gases or Vapors.**
 - Looks for concentrations greater than 10% of "lower flammability/explosive limits".
 - Most commonly involves gases such as methane, acetylene or gasoline.
- **The third test deals with Toxic Gases Vapors and Fumes.**
 - Such as hydrogen sulfide and carbon monoxide.
 - Can cause loss of consciousness and even brain damage.
 - Never enter a space that has dangerous levels of these substances
- **Remember, conditions within a space are constantly changing.**
 - Periodic atmospheric testing is crucial.
- **Gases have different weights.**
 - They tend to sink or rise to various levels in the air (stratification).
 - This makes it difficult to detect breathing hazards from outside a space.
 - In these situations, air must be probed by entrants as they descend.
- **Forced Air Ventilation is often required to improve a space's air quality.**
 - Clean air is forced through a hose into the space.
 - Continuous use can often eliminate atmospheric hazards.
 - In a very large space the aim should be to ventilate the immediate work area.
 - Ventilation (and periodic testing) should continue until everyone has left the space.

- **If atmospheric problems can't be cured with ventilation, respiratory protection will be needed.**
 - The type of equipment will vary depending on the conditions.
 - May include cartridge respirators or even a Self-Contained Breathing Apparatus (SCBA).
 - If you have any questions, see your supervisor.

- **Once a space is "opened", temporary barriers or railings should be erected.**
 - Helps prevent accidental falls.
 - Keeps tools and supplies from being knocked into the space.

- **If during Confined Space work, any threatening hazard unfolds, work must stop and the Permit will be canceled.**

- **If a rescue effort is needed, special personnel will be called.**
 - May be an in-house team.
 - Could be an outside group.

- **Rescue Teams must:**
 - Receive basic training in First Aid and CPR.
 - Be kept informed of potential rescue scenarios.
 - Be notified of any changes to your facility's Confined Spaces.

- **Not all Confined Spaces require a Permit for entry.**
 - You must be able to determine, without going in the space, that it is totally free of hazards.
 - These spaces can be designated "Non-Permit Spaces".
 - Work can be done in these spaces without following the guidelines in the Permit Program.

- **Spaces that are originally classified as Permit-Required, may also later be reclassified as Non-Permit Spaces.**
 - For instance, Lock-Out/Tag-Out can neutralize dangerous moving parts.
 - Forced air ventilation could clear up atmospheric hazards.

*** * * SUMMARY * * ***

- **Confined Spaces can be extremely hazardous.**
- **Refamiliarize yourself with OSHA's Confined Space Regulation.**
- **Know your role on the Entry Team.**
- **Be aware of potential Confined Space hazards.**
- **Use the correct safety equipment.**
- **Follow the Entry Permit rigorously.**
- **Periodically monitor the air in your space.**