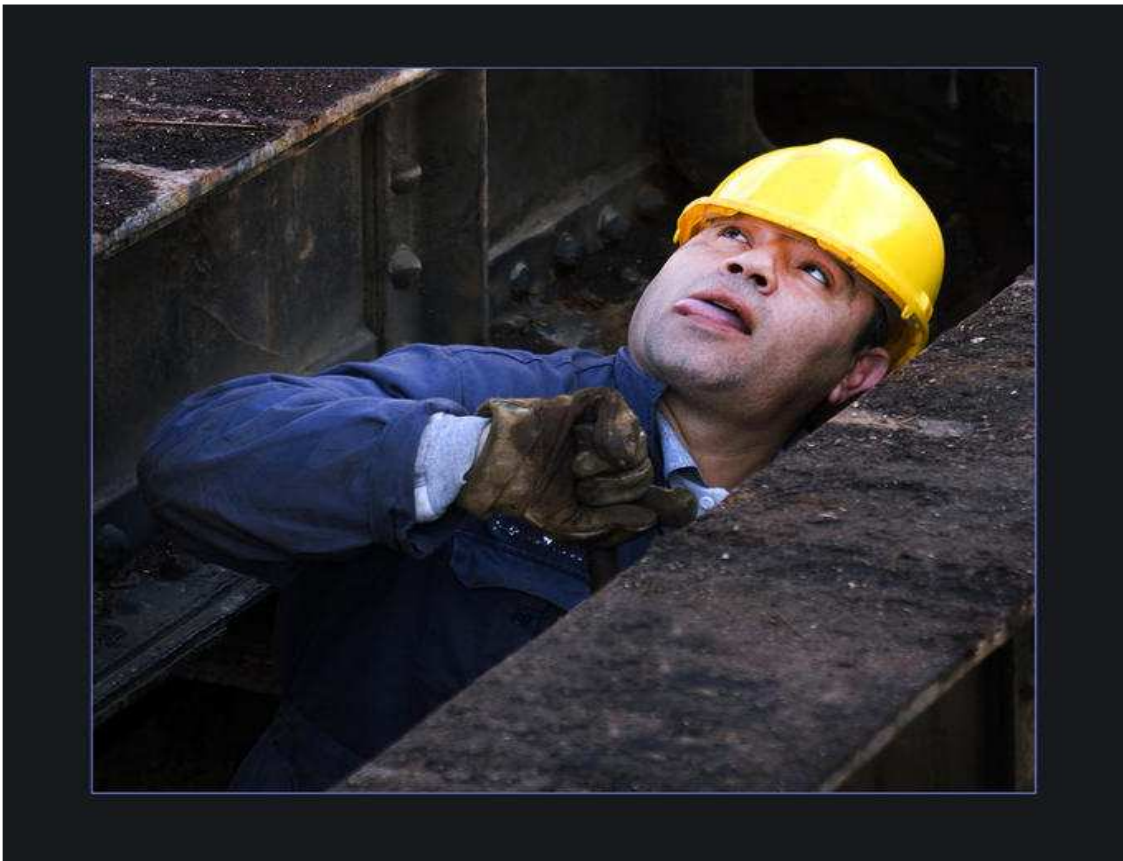


## Confined Space Safe Procedures



## SAFE PROCEDURES

After the atmosphere in a confined space has been tested, the entry permit completed, and the pre-entry briefing held, work can begin.

The following actions should be taken and maintained during the entire confined space operation:

- 1 Permit issuer posts the entry permit near the entrance of the confined space and leaves it there until all work is completed.
- 2 Permit issuer determines the need for continuously sampling the air and designates the person who will monitor it.
- 3 Permit issuer determines if notices warning of the potential of the potential of fire or explosion should be posted until the completion of all work.
- 4 Permit issuer is available for consultation or assistance.
- 5 Attendant/Rescuer remains outside the space and at the entrance to maintain constant communication with the entrants.
- 6 Attendant/Rescuer keeps a count and constant track of all entrants.
- 7 Rescue team with equipment is on standby if required.
- 8 Entrants put on appropriate personal protective and rescue equipment as the attendant sets up the specified rescue equipment for the rescue team
- 9 Entrants and attendants verify that ventilation is continued until completion of all work
- 10 Entrants take precautions to not create hazardous breathing, toxic or explosive atmospheres.
11. Whenever anything in the work environment changes- new odors, escaping liquids or gases, or the smell of smoke- the entrant should leave the confined space immediately.

# SAFETY AND ENVIRONMENT EDUCATION FOR DEVELOPMENT

- 12 Entrants use appropriate tools and work procedures. A Cutting, Welding and Hot Work Permit is completed if hot work (welding, cutting, brazing, riveting, etc.) is to be done
- 13 Firefighting personnel, if specified on the entry permit, remains on site with required firefighting equipment.

## EXITING CONFINED SPACES

The permit issuer has final responsibility for the Confined Space after the work ends, but attendants/ rescuer and entrants also have key roles.

The steps for exiting and concluding a confined space operation:

- 1 Entrants vacate the confined space.
- 2 Attendant/Rescuer (or designated entrant) makes sure that all employees are out of the confined space.
- 3 Attendant (or designated entrant) checks the confined space and notifies the Plant Engineer that the operation is complete.
- 4 Entrant(s) close the opening (where one exists) to secure the confined space.
- 5 Entrant(s) remove all lockout devices.
- 6 Plant Engineer inspects all equipment, remove and report items and need repair, and return the rest of storage.
- 7 Attendant or designated entrant returns the entry permit to the permit issuer who verifies the completion of the operation.

# SAFETY AND ENVIRONMENT EDUCATION FOR DEVELOPMENT

## ALWAYS

1. Permit only trained personnel to test, act as an attendant, or enter a confined space
  2. Identify each confined space by applying the confined space definition.
  3. Follow everything specified in the entry permit
  4. Be sure the air in a confined space has been tested before entering.
  5. Leave a confined space or remove an entrant if any signs of physical distress are observed.
  6. Purge and ventilate confined spaces where testing indicates a problem with the air.
  7. Continue to monitor air in confined spaces while work is going on (if specified on the permit)
  8. Consider any dust, fume, chemical, gas or mist as potentially dangerous.
  9. Have the attendants/ rescuer standing by if the entry permit requires it.
  10. Use precautionary equipment at confined space sites.
  11. Use only respirators that are specified on the entry permit.
  12. Allow only trained permit issuers to test the air before entering a confined space.
  13. Have the entry permit signed by the permit issuer before reentering if a confined space is vacated
  14. for any reason.
  15. When ventilating, blow air into a confined space rather than exhaust it out.
  16. Confine the work to the area or equipment specified on the entry permit.
- Return equipment in clean and good condition and report item needing repair.

# SAFETY AND ENVIRONMENT EDUCATION FOR DEVELOPMENT

The entrant must leave the confined space if the work environment changes in any adverse way (new odors, escaping liquids or gases, smell of smoke).

## NEVER

1. Enter a confined space without a permit or if the air has not been tested beforehand.
2. Attempt a rescue or allow anyone other than rescue personnel to enter a confined space to attempt a rescue.
3. Ignore procedures or required testing and equipment on the entry permit.
4. Smoke, eat or have food in a confined space.
5. Use supplied air respirators unless you are trained, certified and fit tested.
6. Work in a confined space where lockout is required unless you are trained in the Energy Control and Power Lockout program.
7. Work in a confined space without specified personal protective equipment.
8. Enter a confined space until all rescue equipment on the entry permit is available and in place
9. Weld, braze, cut, burn or do other hot work in a confined space without a completed Hot Work Permit.

# SAFETY AND ENVIRONMENT EDUCATION FOR DEVELOPMENT

## INSPECTION PROCESS

Criteria	Yes	No	Comments
• Is a Confined Space Entry Permit, signed by the entry supervisor, provided prior to any permit required confined space?	<input type="checkbox"/>	<input type="checkbox"/>	
• Are confined spaces thoroughly emptied of any corrosive or hazardous substances (acids or caustics) before entry?	<input type="checkbox"/>	<input type="checkbox"/>	
• Are all lines to a confined space containing inert, toxic, flammable or corrosive materials, shut off and blanked, disconnected or separated before entry?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is it required that impellers, agitators or other moving equipment inside confined spaces be locked-out and tagged before entry?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is exhaust ventilation required before confined space entry?	<input type="checkbox"/>	<input type="checkbox"/>	
• Are gas tests performed for oxygen deficiency, toxic substances and explosive concentrations before confined space entry?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is there adequate illumination for confined space work?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is the atmosphere inside the confined space periodically tested or continuously monitored during the conduct of work?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is there an assigned safety standby employee outside of the confined space, when required, whose sole responsibility is to watch the work in progress, sound an alarm and render assistance if necessary?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is the standby employee trained and equipped to handle an emergency?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is the standby employee prohibited from entering the confined space in an emergency unless relieved by a qualified safety standby and equipped with lifelines and respiratory equipment?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is communication provided between the standby employee and confined space entrants, as well as emergency rescue personnel?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is self-rescue equipment provided?	<input type="checkbox"/>	<input type="checkbox"/>	
• Is safety equipment and clothing provided when required?	<input type="checkbox"/>	<input type="checkbox"/>	

## SAFETY AND ENVIRONMENT EDUCATION FOR DEVELOPMENT

<ul style="list-style-type: none"><li>• Is approved respiratory equipment required if the atmosphere inside the confined space cannot is hazardous?</li><li>• Before gas welding or cutting is started in a confined space, are hoses checked for leaks, compressed gas cylinders forbidden in the confined space, torches lighted outside the confined space, and is the confined area tested for toxic and combustible gases?</li><li>• Is exhaust ventilation required when welding or hazardous materials are used in a confined space?</li></ul> <p>ADDITIONAL REMARKS:</p>			
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