Confined Space Entry

1 PURPOSE
To provide a process to minimize workers exposure to inherent hazards when working in confined spaces.

2 DEFINITIONS

Attendant is an assigned person trained in confined space entry that remains directly outside a confined space to maintain contact by effective communication means, with people entering a confined space.

Confined Space Entry Permit is a checklist that identifies the confined space, the nature of the work to be conducted and the controls in place for hazards. The permit is good only for the period during which the work is being conducted.

Confined Space is a space that:
• Is not designed for continuous worker occupancy.
• Can be subject to build-up of toxic and flammable gases.
• Can have an oxygen enriched or oxygen deficient atmosphere.
• Has limited openings for entry and exit, such as tanks, ducts, silos, vessel, hoppers, tires, dumpsters, etc.
• Can have hazardous conditions and areas as a result of the type of work performed inside it.

Entering personnel is any person entering a confined space.

Gas Detection Equipment Operator is the person trained in use of equipment to monitor air quality in a confined space.

Hazardous Atmosphere is an atmosphere that may expose employees to the risk of death, incapacitation, impairment of the ability to self-rescue, or injury or acute illness. For example:
• Flammability greater than 10% of its Lower Explosive Limit (LEL).
• Combustible particulate at a concentration greater than 10% of its Minimum Explosive Concentration (MEC).
• A toxic, corrosive or asphyxiate condition.
Non-Atmospheric Hazards are conditions such as mechanized or hydraulic equipment, loose materials, excessive noise, extreme temperatures, slippery surfaces, falling objects, low light and difficult access.

Oxygen Deficient Atmosphere is an atmosphere containing less than 19.5% oxygen by volume. The normal contents of oxygen are 20.8%.

Oxygen Enriched Atmosphere is an atmosphere containing more than 23.5% oxygen by volume.

3 ROLES AND RESPONSIBILITIES

Contractors/Vendors

Contractors/Vendors are businesses performing a service for your mine. They are responsible for ensuring their employees working on site have completed the required permit as specified in this procedure and that their employees understand and comply with the requirements as outlined in this procedure.

Employees and Contracted Employees

All employees in any position whether regular employees or contracted employees working on site. They shall know, understand, and are responsible for complying with the requirements as outlined in this procedure each time Confined Space Work is to be executed.

Attendant

Any trained individual whether regular or contracted stationed outside the confined space as an observer, who monitors authorized entrants/entering personnel, and who performs all the attendant duties.

Authorized Entrant/Entering Personnel

Any trained individual who is authorized by your mine to enter a confined space.

Health Safety and Loss Prevention (HSLP)

HSLP is any mine employee working under the direction of the HSLP Department. They are responsible for periodically auditing for compliance to this procedure including correct completion of permits, and for maintaining the original Confined Space Work Permits.

Supervisor/Foreman or Designee

Supervisor/Foreman or Designee can be an employee or a contractor/vendor working or traveling on any mine site. They are responsible for ensuring the permit is completed...
correctly, enforcement of all confined space requirements, rules, and established guidelines as outlined in this procedure. They ensure personnel are provided with the needed resources to properly carry out the requirements of this procedure, are adequately trained, and understand the provisions outlined in the confined space procedure. They inspect the location of the confined space and review information on the permit ensuring it is complete before signing it.

4 STANDARD REQUIREMENTS

General

- Only authorized and trained personnel will enter a confined space.
- Complete, sign, and retain the Authorization Permit for Work in Confined Spaces.
- Cylinders containing oxygen, acetylene and other gases will not be accepted inside the confined space.
- Oxygen must never be used to ventilate a confined space.
- Adequate lighting will be provided according to the activity to be performed.
- The electrical equipment must be properly grounded.
- Any work in confined spaces will be stopped if conditions under which the authorization was given have changed. The work will be restarted once the safety conditions have been re-established.
- Atmospheric checks will be conducted every three hours or more often if conditions warrant and before re-entering confined spaces.

Supervisor

The supervisor or his authorized (trained and competent) designee plans the entrance answering the following questions:

- In which part of the process is the confined space involved?
- What Lock-out/Tag-out will be required?
- Which hazardous atmosphere requires attention?
- Are loose materials secured?
- How is the space going to be ventilated and illuminated?
- What is necessary to provide a safe access?
- Who will enter?
- Who will be the attendant?
- What personal protective equipment will be required?
- Would other work be involved, e.g. hot work, work at height, etc.?
• Precautions?
• What emergency equipment is necessary?
• When will work start?
• When will it be completed?
• Is additional air quality monitoring required?
• What other hazards and risks are possible because of the work to be performed?

A copy of the Authorization for Work in Confined Spaces will be signed by the supervisor or his authorized designee and posted at the entrance of the space.

**Attendant**

• Remains outside the confined space as an observer and never enters the confined space.
• Know the confined space hazards, to include the symptoms and consequences of exposure.
• Maintain constant communication with people entering the confined space.
• Keep non-authorized persons outside the area of the confined space.
• Order the evacuation of the confined space if conditions become hazardous.
• Has a method of communication for any emergency to initiate rescue procedures.

**Entering personnel**

• Be trained in confined space entry.
• Know the confined space hazards, to include the symptoms and consequences of exposure.
• Follow the required Lock-out, Tag-out procedures.
• Enter only if the permit authorizing entry has been completed and signed by the supervisor or his designee.
• Follow the requirements on the permit authorizing entry.
• Maintain continuous communication with the attendant.
• Monitor work conditions in the confined space and notify the attendant immediately of hazardous conditions.
• Evacuate or leave the space immediately when monitoring indicates a hazardous condition or when the attendant orders an evacuation.