Hazard Control Systems

Info Sheet 6a

Once you identify either potential or actual hazards, the Occupational Health and Safety Act requires planning and organizing the work to ensure the hazards are minimized. You must choose hazard control systems and/or equipment to minimize the impact of the hazard. A rule of thumb used, is to apply one control for each hazard identified.

Confined spaces, because of their uniqueness will require more planning than normal to develop the necessary safeguards. Often we improvise or omit these systems because we haven't adequately planned the job. The temporary nature of the work and the safeguards will require thought in the selection process. Selecting any confined space safeguard must balance:

- size - being able to fit the job,
- portability - being able to easily move in and out,
- capability - being able to do the job required, and
- price - being able to afford it.

The set up and operation of these temporary safeguards need to be documented to assist the memory of your workers as it might be a while since the last time they worked in the confined space. In other words "written instructions" are needed to guide the worker in the set up and operation of these temporary hazard control systems. Written instructions must be provided for each piece of equipment used and if the equipment is part of a system, the system's operating instructions must also be supplied. The instructions should detail:

1. the equipment and tools necessary,
2. details on where/how to set up the system,
3. operating parameters (what should happen), and
4. troubleshooting information.

Photos and drawings should be included where possible. In addition, the information provided must be concise, understandable and detailed. Good procedures provide enough information that will eliminate guessing or "free lancing" by the workers.

Working in these areas will require an investment of time and money to do it properly. A confined space system needs equipment, procedures, training and people to accomplish the work safely.

Hazard Control Systems

Info Sheet 6 b

One or more of the following systems, tools and equipment will be required to control the hazards at a site.

System	Description
Atmospheric Monitoring	Testing equipment used to determine the air quality inside the space (e.g. oxygen, toxic gases, temperature, humidity, noise etc.)
Attendant	An individual whose primary task is to initiate the emergency response system. They can also evaluate and monitor hazards, operate hazard control equipment (fans, testers, etc.), complete paperwork, as well as assist the emergency response team (e.g. provide first aid, be the attendant during rescue or perform non-entry rescue operations).
Chemical Management	The efforts used to control exposure to a hazardous substance (e.g. purging, proper storage, etc.)
Communication System	Equipment that allows the Attendant to talk to the Entrant, Emergency Dispatcher and Rescuers.
Decontamination	A cleaning system to prevent the spread of any material from the space by the Entrant and/or tools that were used in the space.
Electrical Safety	Devices and knowledge that prevent injury due to exposure with uncontrolled electricity.
Fall Protection	Systems to prevent people of objects moving unexpectedly from one level to another.
Guarding	The physical devices or systems added to equipment to prevent possible injury during their use.
Housekeeping	The act of cleaning and organizing any debris, tools or materials at the site.
Hot Work Controls	The system, devices and work processes designed to prevent fires.
Lighting	Portable lights that provide 5 watts/m² or .46 watts/ft² in the work areas and the travel path.
Lockout	Locks and attachment devices that ensure switches, valve handles and doors remains in specific position such as OFF.
PPE	Personal protective equipment that a worker wears to minimize the impact of a hazard.
Procedures	Written instructions for equipment operation or how to operate a system.
Performance Auditing	A formalized system of measuring compliance to a standard.
Signage	Warning, directional or informational signs posted at a site.
Shoring/ Framing	Barriers deployed to prevent engulfment of workers from the movement of any free flowing solid into an area.
Temperature Management	Actions and tools to increase or decrease core body temperatures as required.
Traffic Protection	Actions and tools required to redirect traffic around the worksite.
Training	Classroom, practical or on the job instruction to enable someone to complete a task
Ventilation	Natural drafts or the use of fans, ductwork and filters that either supply fresh air into the space or that exhaust gases, smoke, dust, fumes and/or mists from the space.