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## 700.3.A Workplace Health and Safety – Types of Hazard

## Controls

Hazard control involves eliminating or reducing the risk of harm to workers as much as is reasonably practicable. Hazards can be controlled using one of three general approaches:

- engineering controls;
- · administrative controls; and
- personal protective equipment.

**Engineering Controls:** This method normally focuses on eliminating or physically controlling the hazard. Examples include substituting a less toxic chemical or quieter piece of equipment, guarding a machine, enclosing a noisy cab with sound absorbing materials, installing ventilation, putting up barricades, or installing more electrical outlets so cords are not running through traffic areas. Engineering controls are the preferred method of control as there is a lesser likelihood of human error involved.

Administrative Controls: This method is applied when engineering controls are not adequate or practical. Administrative controls focus on managing the hazards through procedures or schedules. Examples include doing certain tasks when there are fewer people present to lessen possibility of exposure, job rotation to prevent repetitive strain injuries, Safe Job Procedures to ensure hazardous tasks are done correctly. Signage is also an administrative control. It is important to understand that administrative controls do not actually "control" the hazard but rather "manage" the hazard.

**Personal Protective Equipment:** This method is used when engineering and administrative controls are not practical or adequate. Personal protective equipment is the last and least preferred method of control. Examples include hard hats, steel-toed boots, dust masks, safety glasses, gloves, and ear plugs. With personal protective equipment (PPE), hazards are not controlled. It is simply the impact the hazard may have that is controlled. For instance, it is still noisy but the employees' ears are protected, the employee fell off the roof but did not hit the ground due to fall protection, a rock flew from the lawn mower but struck the safety glasses and did not enter the employee's eye.

These methods of hazard control are to be used in response to identified hazards in the work site. Often, a combination of control measures will be required to eliminate or sufficiently reduce the risk of hazards to an acceptable level.

