Hierarchy of Controls Meeting Kit

HIERARCHY OF CONTROLS FOR WORKPLACE SAFETY

Controlling exposures to occupational hazards is the fundamental method of protecting workers. Traditionally, a hierarchy of controls has been used as a means of determining how to implement feasible and effective control solutions.

The idea behind a hierarchy of controls at the top of graphic are potentially more effective than those at the bottom.

Eliminating the hazard and risk is the highest level of control in the hierarchy, followed by reducing the risk through substitution, isolation and engineering controls, then reducing the risk through administrative controls. Reducing the risk through the use of protective personal equipment (PPE) is the lowest level of control.

USING THE HIERARCHY OF CONTROL

- **Eliminate the risk**

The most effective control measure involves eliminating the hazard and its associated risk. The best way to eliminate a hazard is to not introduce the hazard in the first place. For example, you can eliminate the risk of a fall from height by doing the work at ground level.

Eliminating hazards can be cheaper and more practical at the design or planning stage of a product, process or workplace. In these early stages, there is more scope to design to eliminate hazards or to include risk control measures that are compatible with the requirements of the origin design and function.

Employers can also eliminate hazards and risks by removing the hazard completely. For example, removing trip hazards on the floor or disposing of unwanted chemicals eliminates the risks they create.

It may not be possible to eliminate a hazard if doing so means you are unable to make the end product or deliver the service If it is not possible to eliminate the hazard, then you must eliminate as many of the risks associated with the hazard as possible.

- **Reduce the Risks Through Substitution, Isolation or Engineering Controls.**

If it is not reasonably practicable to eliminate the hazards and associated risks, minimise the risks by:

Substitution. Substitute the hazard with something safer. For example:

- use a scourer, mild detergent and hot water instead of caustic cleaners for cleaning
- use a cordless drill instead of an electric drill if the power cord is in danger of being cut
- use water-based paints instead of solvent-based paints

Isolation: Isolate the hazard. For example:

- use concrete barriers to separate pedestrians and employees from powered mobile plant
- use remote controls to operate machines
- install guard rails around holes

Engineering controls

An engineering control is a control measure that is physical in nature, including a mechanical device or process. Examples of engineering controls include:

- mechanical devices such as trolleys or hoists to move heavy loads.
- pedestrian-sensing systems
- guards around moving parts of

machinery
- speed-governing mechanisms
- **Reduce the risk using administrative controls**

Administrative controls are work methods or procedures designed to minimise exposure to a hazard. In most cases, administrative controls use systems of work to control the risk. For example:

- Developing procedures on how to operate machinery safely.
- Using signs to warn people of a hazard
- Limiting exposure time to a hazardous task
- **Reduce the risk using personal protective equipment (PPE)**

PPE refers to anything employees use or wear to minimise risks to their health and safety. PPE includes but is not limited to the following:

- ear muffs and earplugs
- goggles
- respirators
- face masks
- hard hats
- safety harnesses
- gloves
- aprons
- high-visibility clothing
- body suits
- protective eyewear
- safety footwear
- sunscreen

PPE limits exposure to the harmful effects of a hazard but only if employees wear and use the PPE correctly.

Use administrative controls and PPE only:

- as last resorts when there are no other practical control measures available
- as an interim measure until introducing a more effective way of controlling the risk
- to increase the effectiveness of higher-level control

measures

FINAL WORD

Consider various control options and choose the controls that most effectively eliminate the hazard or, if elimination is not reasonably practicable, minimise the risk in the circumstances. Reducing the risk may involve a single control measure or a combination of different controls that work together to provide the highest level of reasonably practicable protection.