

## **HIRARC Programme**

HIRARC is the fundamental of safety. Have you mastered the skills?  
Interested to get the updated information on HIRARC?

### **Introduction**

Being the essential concept of all Occupational Health & Safety Management System (OHSMS), the Understanding, Evaluation and Implementing Effective Hazard Identification, Risk Assessment & Risk Control (HIRARC) at Workplace Training shape the entire Occupational Health & Safety Management System. Wrong or inadequate HIRARC will lead to significant non-conformity during certification, resources spent without sizable return, and employee loss of interest. The HIRARC should be based on the Failure Mode & Effect Analysis and focus on the Severity and Probability of Risk. Occupational safety & health legislation training is developed for Industries to fulfil the legislative requirement under OSHA 1994 & FMA 1967. Having knowledge of this OSH regulation in Malaysia legal framework will make the employee and employer understand their roles and duty to protect the employee and keep a safe and healthy workplace. This module provides a basic understanding to give awareness among employees and employers, particularly those who deal with OSH issues, e.g. Internal OHSMS Auditor. This program will allow them to also conduct HIRARC activities more efficiently.

### **Program Objectives**

The program aims to:

- To identify environmental, occupational safety and health laws, regulations and other requirements
- To introduce the regulatory framework of Malaysia (OSHA 1994, FMA 1967 and others) and the influence of other international treaties on the direction of Malaysian legislation

### **Learning Outcomes**

After completing this program, the participants should be able to:

- To understand the definition of Occupational Hazard Risk
- To understand and implement the method of HIRARC
- To understand the consideration of factors in deciding tolerable & intolerable risk

### **Who Should Attend?**

Company Internal Auditor, SHE Committee and SHE representative or any employees responsible for the HSE practice at the workplace and continuous implementation of an environmentally safe and sound work environment through their daily operation.

## Methodology

Case studies, forum discussion, role-play, presentations, gamification

## Course Outline

Time	Day 1
9.00am-9.30am	Introduction to Occupational Safety and Health Laws in Malaysia and relevancy OSHMS and the HIRARC Program.
9.30am-9.55am	<b>Chemical Hazard</b> <ul style="list-style-type: none"><li>• Types of hazards</li><li>• Routes to exposure</li><li>• Symbols</li><li>• First aid</li><li>• Long-term risks<ul style="list-style-type: none"><li>○ Cancer</li><li>○ Cardiovascular disease</li></ul></li></ul>
9.55am-10.45am	<b>Physical Hazard</b> <ul style="list-style-type: none"><li>• Falls</li><li>• Machines</li><li>• Confined spaces</li><li>• Noise</li><li>• Temperature<ul style="list-style-type: none"><li>○ Cold Stress</li><li>○ Heat stress</li></ul></li><li>• Electricity</li><li>• Sunlight</li><li>• Vibration</li></ul>
10.45am-11.00am	<b>Break</b>
11.00am-11.45am	<b>Biological hazard</b> <ul style="list-style-type: none"><li>• Classification</li><li>• Levels of biohazard</li><li>• Symbol</li><li>• Other hazards</li></ul>

11.45am-12.30pm	<p><b>Psychosocial hazard</b></p> <ul style="list-style-type: none"> <li>● Causes</li> <li>● Impact <ul style="list-style-type: none"> <li>○ Psychological</li> <li>○ Physiological</li> <li>○ Social and behavioural</li> </ul> </li> <li>● Economic</li> </ul>
12.30pm-1.30pm	<p><b>Lunch</b></p>
1.30pm-2.45pm	<p><b>Hazard Identification</b></p> <ul style="list-style-type: none"> <li>● Observations, Inspections, Audits</li> <li>● References to Standards / Law</li> <li>● Complaints</li> <li>● Accident reports</li> <li>● Review of work activities</li> <li>● Job Safety Analysis</li> <li>● Hazards and Operability Studies (HAZOP) Hazards Analysis (HAZAN)</li> <li>● Process of HIRARC: Risk Assessment</li> </ul>
2.45pm-3.15pm	<p><b>Risk Control</b></p> <ul style="list-style-type: none"> <li>● Elimination</li> <li>● Substitution</li> <li>● Isolation</li> </ul> <p><b>Risk Control - Engineering</b></p> <ul style="list-style-type: none"> <li>● Types and Examples of Engineering Controls</li> <li>● Non-ventilation engineering controls</li> <li>● Ventilation</li> <li>● General Ventilation</li> <li>● Local Exhaust Ventilation</li> <li>● Designing and Implementing Engineering Controls</li> <li>● Design considerations</li> <li>● Additional benefits of the reasonable control</li> <li>● Ensuring that Engineering Controls are effective and reliable</li> <li>● Why engineering controls often fail to protect workers</li> <li>● Commissioning</li> </ul>

	<ul style="list-style-type: none"> <li>● Worker Training</li> <li>● Checks, Monitoring and Maintenance</li> </ul>
3.15pm-3.30pm	<b>Break</b>
3.30pm-4.45pm	<p><b>Risk Control – Administrative Control</b></p> <ul style="list-style-type: none"> <li>● Administration control</li> <li>● Monitoring controls</li> <li>● Safe work procedures</li> <li>● Signage</li> <li>● Training</li> <li>● Supervising</li> </ul> <p><b>Risk Control- PPE</b></p> <ul style="list-style-type: none"> <li>● Introduction</li> <li>● Basic definitions</li> <li>● Directives concerning PPE</li> <li>● General rule</li> <li>● Provision of PPE</li> <li>● CE marking</li> <li>● Selection of suitable PPE</li> <li>● Employer’s checklist</li> <li>● Important information</li> <li>● Training</li> <li>● Maintenance and inspection</li> </ul>
4.45pm-5.00pm	Conclusion, Presentation & Evaluation