Purpose:	To establish a proactive and continuing process for hazard identification, assessment of OH&S risks and opportunities, selection of controls and verification of residual risk.
Scope:	This procedure applies to routine and non-routine activities, products, services, workplaces, project lifecycle stages, workers, contractors, visitors, equipment, materials and changes within the OHSMS scope.
Duties & Responsibilities	(1) Managing Director (MD): Ensures adequate resources and accepts significant residual risks requiring top-management decision. (2) Executive Director (ED): Oversees consistent application across departments and projects. (3) Safety and Health Officer (SHO): Maintains the methodology, facilitates significant assessments and verifies controls. (4) Head of Department (HOD): Ensures departmental activities and changes are assessed before work. (5) Project Manager (PM): Ensures project HIRARC is completed, communicated and implemented. (6) Site Safety Supervisor / Safety Coordinator: Facilitates workplace hazard identification and verifies controls. (7) Project Supervisor (PS) and Workers: Participate using task knowledge and stop/report work where controls are inadequate.
ISO Reference:	MS ISO 45001:2018 Clause 6.1.2

Revision History			
Revision No.	Revision Date	Originator	Description of Changes
0	01 Sept 2026	ISO Manager	Initial issue for implementation of MS ISO 45001:2018 Clause 6.1.2

Abbreviation & Definition	
ED	Executive Director
HIRARC	Hazard Identification, Risk Assessment and Risk Control
HOD	Head of Department
JSA	Job Safety Analysis
MD	Managing Director
MOC	Management of Change
OHS	Occupational Health and Safety
OHSMS	Occupational Health and Safety Management System
PIC	Person in Charge
PM	Project Manager
PTW	Permit to Work
SC	Safety Coordinator
SHO	Safety and Health Officer
SSS	Site Safety Supervisor

Step	Activity	PIC	Reference
1	**<u>Initiation and Assessment Team</u>** **1.1 Assessment Triggers** HIRARC shall be completed before new work and reviewed for changes, incidents, new information, legal changes, worker concerns, abnormal conditions and evidence that controls are ineffective. **1.2 Competent Team** The responsible HOD or PM shall appoint a team including the supervisor, persons familiar with the work, affected workers and competent HSE or technical personnel. **1.3 Work Breakdown** The workplace, process or project shall be divided into logical activities and tasks covering design, mobilisation, installation, testing, energisation, maintenance, demobilisation and emergencies.	HOD / PM / SHO / SC / SSS / PS	DOSH HIRARC Guidelines; OHSMS-06J
2	**<u>Hazard Identification</u>** **2.1 Sources of Hazard** Identify physical, electrical, mechanical, chemical, biological, ergonomic and psychosocial hazards, including human factors and work organisation. **2.2 Conditions and Persons** Consider routine, non-routine, start-up, shutdown, maintenance, emergency and reasonably foreseeable conditions and persons with differing competence, language, age, ability or vulnerability. **2.3 Interfaces and Lifecycle** Consider contractors, visitors, simultaneous operations, public interfaces, design, procurement, transport, installation, commissioning, waste and end-of-life activities. **2.4 Past and Emerging Information** Use incidents, near misses, occupational illness, monitoring, inspections, legal changes, industry alerts, climate-related conditions and worker input.	SHO / HOD / PM / SC / SSS / PS	OHSMS-04B; OHSMS-05I; OHSMS-10V
3	**<u>Risk Assessment</u>** **3.1 Existing Controls** Record current controls and evaluate whether they are implemented, suitable and reliable.	SHO / HOD / PM	DOSH HIRARC Guidelines; OHSMS-06J

Step	Activity	PIC	Reference
	3.2 Likelihood and Severity Rate likelihood and severity using the approved 5 × 5 matrix. Risk Rating = Likelihood × Severity. **3.3 Risk Classification** Low: 1–4; Medium: 5–12; High: 15–25. Professional judgement and legal requirements shall override a numerical score where necessary. **3.4 Uncertainty** Where information is insufficient or consequences are potentially catastrophic, apply precautionary controls and seek competent specialist advice.		
4	**<u>Risk Acceptance and Action Priority</u>** **4.1 High Risk** Work shall not start or continue until risk is reduced and authorised. Imminent danger requires immediate stop-work and isolation. **4.2 Medium Risk** Additional controls shall be planned and implemented within a defined period with responsible PIC and monitoring. **4.3 Low Risk** Maintain effective controls and monitor for change; low rating does not remove applicable legal or mandatory controls.	MD / ED / HOD / PM / SHO	OCS-S-PRO-01; PD-S-PRO-08
5	**<u>Selection of Risk Controls</u>** **5.1 Hierarchy of Controls** Controls shall be selected in order of effectiveness: elimination; substitution; engineering controls and work reorganisation; administrative controls including training and supervision; and suitable PPE. **5.2 Combined Controls** Where one measure is insufficient, use complementary controls and define performance requirements for critical controls. **5.3 Design and Procurement** Eliminate or reduce hazards through design, prefabrication, equipment selection, specifications and procurement before relying on worksite behaviour.	SHO / HOD / PM	OHSMS-08; CD-S-PRO-01; PD-S-PRO-07

Step	Activity	PIC	Reference
	5.4 Legal Minimum Controls shall meet applicable legal, contractual, manufacturer and technical requirements as a minimum.		
6	**Approval, Communication and Implementation** **6.1 Approval** The responsible HOD or PM and SHO/competent HSE person shall approve the HIRARC. High residual risk requires the designated senior authority. **6.2 Work Control Linkage** Control measures shall be incorporated into method statements, JSA, PTW, drawings, inspection plans, procurement, training and emergency arrangements. **6.3 Communication** Project Supervisor shall brief affected workers in a language and form understood and verify understanding before work. **6.4 Field Verification** Supervisors, SC, SSS and SHO shall verify that required controls are present and effective at the workface.	HOD / PM / SHO / SC / SSS / PS	PD-S-PRO-01; PD-S-PRO-08; OHSMS-07N
7	**Review and Change Management** **7.1 Planned Review** Review HIRARC at planned intervals appropriate to the risk and project phase. **7.2 Mandatory Review** Review after an incident or near miss, change in design/process/equipment/material/personnel, new legal requirement, worker concern or evidence of control failure. **7.3 Dynamic Assessment** Supervisors and workers shall reassess conditions before starting and when conditions change. Dynamic assessment supplements but does not replace formal HIRARC. **7.4 Version Control** Superseded assessments shall be withdrawn from use and retained in accordance with documented-information controls.	SHO / HOD / PM / SC / SSS / PS	OHSMS-08 MOC; OHSMS-07O; OHSMS-10V

Step	Activity	PIC	Reference
8	**<u>Records and Performance Evaluation</u>** **8.1 HIRARC Record** Record activity, hazard, consequence, affected persons, existing controls, likelihood, severity, risk rating, additional controls, PIC, due date and residual risk. **8.2 Action Tracking** Actions shall remain open until implementation and effectiveness are verified. **8.3 Trend Review** SHO and IM shall analyse recurring hazards, overdue controls, high residual risks and control failures for objectives and management review. **8.4 Worker Feedback** Relevant findings and improvements shall be communicated to workers and worker representatives.	IM / SHO / HOD / PM	OHSMS-09S; OHSMS-09U; OHSMS-10W

Verified By: Name: Eng Choon Leong Appointment: Executive Director Date: 01 Sept 2026	Approved By: Name: Amos Haw Chee Seng Appointment: Managing Director Date: 01 Sept 2026

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