Skills Framework for Workplace Safety and Health

A Guide to Occupations and Skills
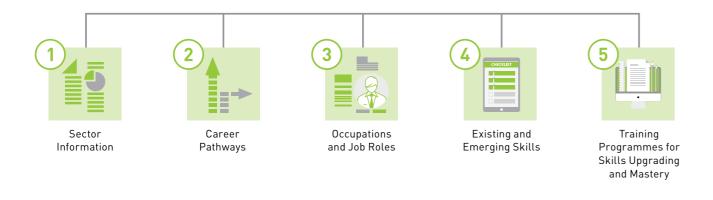
An initiative of

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About the Skills Framework

The Skills Framework is a SkillsFuture initiative developed for the Singapore workforce to promote skills mastery and lifelong learning. Jointly developed by SkillsFuture Singapore (SSG), Workforce Singapore (WSG), and the Workplace Safety and Health Council (WSHC), together with employers, industry associations, education and training providers, and unions, the Skills Framework for Workplace Safety and Health provides useful information on:

1 Sector Information

2 Career Pathways

3 Occupations and Job Roles

4 Existing and Emerging Skills

5 Training Programmes for Skills Upgrading and Mastery

With the Skills Framework, individuals are equipped to make informed decisions about career choices, as well as take responsibility for skills upgrading and career planning.

Assess Career Interests	Prepare for Desired Jobs	Find Avenues to Close Skills Gaps	Renew, Upgrade and Deepen Skills
• Understand career pathways • Recognise personal attributes required	• Understand skills and competencies required	• Identify relevant training programmes to equip oneself with the required skills and competencies • Participate in on-the-job training opportunities provided by companies	• Plan for career development/ transition • Recognise skills and competencies required for the intended job role • Identify training programmes to upgrade and deepen skills

Workplace Safety and Health: Everyone Has the Right to Return Home Safe and Healthy

Preventing work-related illness and injury should be the priority at any workplace. Over the past decade, Singapore has made significant progress in improving Workplace Safety and Health (WSH) outcomes. This could be attributed to the introduction of the WSH reform in 2005, which resulted in a shift from a prescriptive legislative approach under the Factories Act, to a performance-based regime under the WSH Act. Three key principles were introduced with the WSH reform:
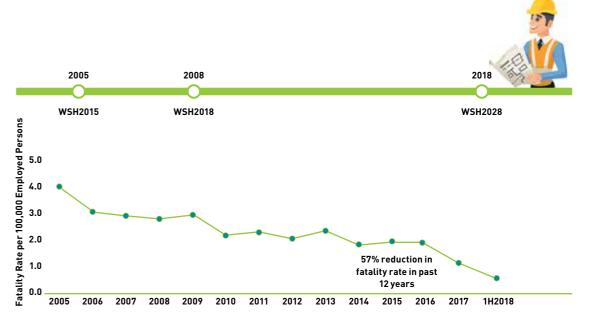
i.   Reduce risks at source;
ii. Place duties on those who create and control risks; and
iii. Prevent accidents through heavier penalties.

Companies thus take ownership of their WSH outcomes and need to adopt a more proactive approach to identify hazards, evaluate and control risks in their workplaces.

To guide the industry transformation, the WSH 2015 and WSH 2018 strategies were developed in 2005 and 2008 respectively. The Workplace Safety and Health Council has built up capabilities, heightened awareness, deepened partnerships amongst stakeholders, and cultivated industry ownership of WSH. These efforts have borne fruit as workplace fatality rate declined steadily, reaching 1.2 per 100,000 employed persons in 2017 – the lowest level on record.

Looking to the future, the Government has announced a new target for WSH, challenging stakeholders to lower the workplace fatality rate to less than 1.0 per 100,000 employed persons by 2028. The WSH 2028 strategy will guide all stakeholders towards achieving this target.

Decline in Workplace Fatality Rate over the Years

2005	2008	2018
WSH2015	WSH2018	WSH2028

57% reduction in fatality rate in past 12 years

An estimated 30,000 professionals have received WSH training under the Singapore Workforce Skills Qualifications (WSQ). More than 5,000 have registered with the Ministry of Manpower (MOM) and the Occupational and Environmental Health Society (OEHS). Global trends and rapid technological developments impact how these WSH professionals carry out their functions and duties. They need to constantly adapt and upgrade their competencies to capitalise on opportunities presented by these trends, so as to stay relevant to industry needs.

To achieve and sustain the WSH 2028 target of lowering the workplace fatality rate to less than 1.0 per 100,000 employed persons, there must be widespread adoption of Vision Zero. Every company must embrace a mindset that all injuries and ill-health at work can be prevented and believe that zero harm is possible. WSH professionals play an important role in promoting the WSH culture of prevention, trust and care. This is only possible if they keep abreast of industry developments and constantly upgrade their competencies to meet the demands of the future WSH landscape.

Major technological advancements are key enablers in improving WSH outcomes. The changing workforce demographic profile requires companies to adopt health promotion initiatives and adapt job tasks for their workers. WSH professionals should be at the forefront in leveraging technological innovations and implementing Total WSH to achieve the next breakthrough in WSH performance.

More than **5,000 WSH professionals** have registered with **MOM or OEHS.**

As many as **30,000 professionals** have attained **WSQ WSH Professionals (WSHP) qualifications**

Based on figures provided by SkillsFuture Singapore WSH Professionals Dashboard

Smart Worksite of the Future

Source: Workplace Safety and Health Council, 2019
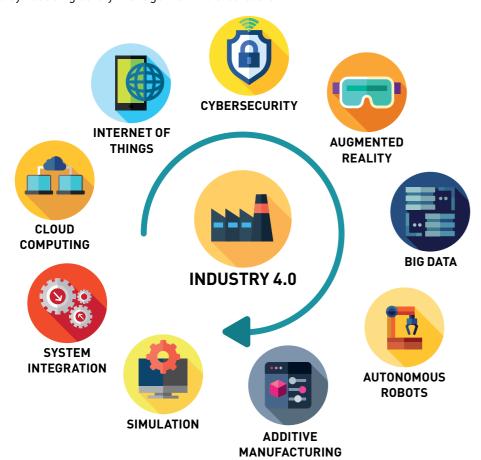
i. Leveraging Big Data and Data Analytics

Singapore is striving to be a leading digital economy. Companies are now looking to get ahead of the curve and creating sustainable changes through the use of data and analytics, such as by tracking the latest megatrends of manual handling injuries, or identifying new areas of injury risk. Data-driven analytic platforms are helping companies to improve safety and health for their workers.

ii. Embracing Digitalisation through the Use of Technology and Infrastructure

Industry 4.0 is transforming the manufacturing sector. Latest developments in connected safety technology enable businesses to protect workers more effectively, and also help them to achieve a competitive advantage by reducing safety management-related costs.

CYBERSECURITY

INTERNET OF THINGS

AUGMENTED REALITY

CLOUD COMPUTING

BIG DATA

INDUSTRY 4.0

SYSTEM INTEGRATION

AUTONOMOUS ROBOTS

SIMULATION

ADDITIVE MANUFACTURING

Source – Drones at Work Part 2 : The new buzz in construction (www.droneblog.com)

Advanced monitoring of workplace conditions helps prevent workplace accidents and ill-health. Sensors can be used to detect high noise or chemical levels that pose danger to workers. Digitalisation facilitates the use of Artificial Intelligence, which detects dangerous behaviours or situations through the use of cameras, and triggers appropriate remedial actions. The use of drones for building inspections eliminates the need for workers to put themselves in dangerous conditions.

iii. Leveraging Technology for World-Class Training and Assessment

While the contents and curriculum of WSH courses are periodically updated to ensure relevance, technology is also used to enhance training delivery and improve assessment methodology. This comes in the form of Blended Learning, Micro Learning, Gamification or Simulations. Virtual Reality/Augmented Reality helps to add realism and interactivity to the learning process, allowing trainees to familiarise themselves with potential hazards in a safe environment. Micro Learning allows sustained and continuous learning using mobile devices. Technology also enhances assessment rigour and ensures that authentic evidence of competency is being gathered, for example by individualising assessment questions for each trainee. Adoption of such technologies helps improve WSH training outcomes.
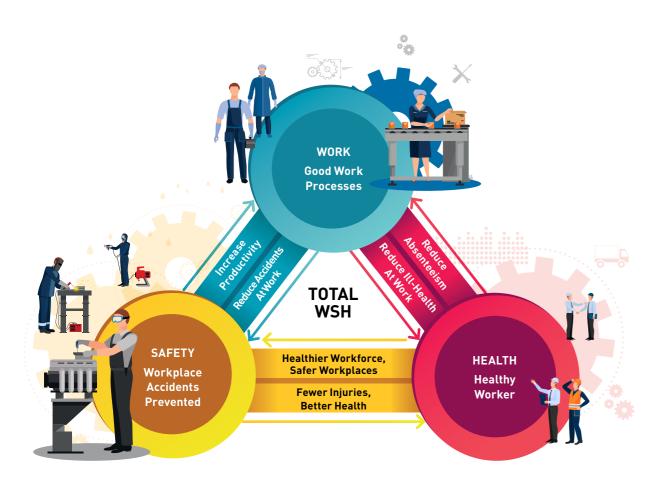
iv. Increasing Emphasis on Health

Demographic changes such as an ageing workforce, and evolution of the concept of work like the gig economy and connected economy are creating new challenges for the workforce and their well-being. Incidences of workplace accidents and injuries, and acute and chronic diseases are increasing, giving rise to the importance of Total WSH. Total WSH is a holistic and integrated approach to manage the interactions between work, safety and health, so as to promote the well-being of workers and employers. The work environment, safety and health of workers are closely interrelated. By improving safety and health at work, it will reduce the risks of injury and ill-health, leading to better well-being for workers and a more productive workforce. Conversely, injury and ill-health at work reduce quality of life and productivity.

Given that the dynamics of Total WSH are huge, current professionals not only need to be equipped with relevant technical competencies, but must also be able to appreciate and comprehend cross-domain knowledge and be able to work with a wide variety of stakeholders, such as healthcare professionals like Designated Workplace Doctors and Occupational Health Nurses, so as to effectively implement Total WSH in companies.

v. Focus on Design for Safety

Adoption of design for safety and design for manufacturing assembly help to address risks at source and lay the foundation for safer work processes. For example, with the bulk of construction and installation works being carried out off-site in a controlled manufacturing environment, risks are reduced to achieve better safety outcomes.

A career as a WSH professional provides diverse opportunities to individuals seeking rewarding and enriching careers. If you are passionate about advocating a culture of prevention, trust and care at the workplace, there are opportunities available for you to pursue your dream and grow your career.

As workplaces continue to transform, these are some examples of skills in demand now and in the near future. Those seeking successful careers in WSH can set themselves apart by developing these attributes and acquiring these skills in demand.

DESIRED ATTRIBUTES

Analytical
Enjoys analysing things from all angles and thinking of ways to solve problems

Resilient
Works through challenges and adversities with a positive mindset

Integrity
Demonstrates moral and ethical principles with co-workers and stakeholders

Team Player
Understands that each person is part of a larger team working to bring about success

Meticulous
Pays attention to fine details and accuracy

SKILLS IN DEMAND

Cloud Computing Application
Manages cloud computing technologies in order to offer a collaborative framework with centralised storage and contact points, fewer visibility barriers, and opportunities to enact simplified, standardised processes

Technology Application
Applies and integrates evaluated technologies into organisation operations or processes to achieve desired outcomes

Data Synthesis
Analyses data to monitor the processes for operations or process flow optimisation

Technology Infrastructure Management and Integration
Evaluates latest available technologies to integrate into existing operations, so as to reduce costs

Internet of Things Management
Interrelates computing devices, equipment and machines' data in a networked environment to provide specific solutions

There is a wide range of initiatives and schemes available to both individuals and employers to promote skills acquisition and upgrading.

FOR INDIVIDUALS

Education and Career Guidance

Education and Career Guidance (ECG) is about equipping students and adults with the necessary knowledge, skills and values to make informed education and career decisions. With the help of trained ECG counsellors, students will be exposed to a wide range of education and career options, and given the opportunities to make informed post-secondary education choices. Singaporeans in the workforce can benefit from career coaching, employability skills workshops, networking sessions through the WSG Career Centres and the Employment and Employability Institute (e2i).

Enhanced Internships

The Enhanced Internships are designed to provide students with a meaningful internship experience through more structured learning and support at the workplace. Participating companies will work closely with the Institute of Technical Education (ITE) and polytechnics to deliver a positive internship experience for their interns.

MySkillsFuture

MySkillsFuture is a one-stop online portal that enables Singaporeans to chart their own career and lifelong learning pathways, through access to industry information and tools to search for training programmes to broaden and deepen skills.

SkillsFuture Credit

Credit of $500 for all Singapore Citizens aged 25 and above to defray costs for a wide range of skills-related courses to encourage skills development and lifelong learning.

SkillsFuture Fellowships

Monetary award of $10,000 to recognise Singapore Citizens with deep skills, who champion lifelong learning, and are committed to contributing to the skills development of others.

SkillsFuture Mid-Career Enhanced Subsidy

Singaporeans aged 40 and above will receive higher subsidies of up to 90% of course fees for over 8,000 SSG-supported courses, and at least 90% of programme cost for Ministry of Education-subsidised full-time and part-time courses.

SkillsFuture Qualification Award

This award encourages Singapore Citizens to attain full WSQ, which equip them with comprehensive and robust sets of skills to perform their jobs competently, pursue career progression and explore new job opportunities.

SkillsFuture Series

Targeted at Singaporeans who are keen to either gain a basic understanding or deepen their skills in eight emerging areas*, the SkillsFuture Series comprises training programmes across three proficiency levels - Basic, Intermediate and Advanced. Adult learners of different skills proficiency and industry background can therefore benefit from the initiative. Eligible individuals will receive 70-90% course fee subsidy.

*Eight emerging areas are: Data Analytics, Cyber Security, Advanced Manufacturing, Urban Solutions, Finance, Tech-enabled Services, Digital Media, and Entrepreneurship.

SkillsFuture Study Awards

A monetary award of $5,000 for adults in their early and mid-career to develop and deepen their skills in future economic growth sectors.

Young Talent Programme

Students from ITE, polytechnics, and universities can embark on overseas internships to take on work-study programmes that will prepare them for international assignments in their future careers.

FOR INDIVIDUALS AND EMPLOYERS

P-Max

The Place-and-Train programme matches jobseeking Professionals, Managers, Executives and Technicians to suitable positions in SMEs, and assists SMEs to better recruit, train, manage and retain their newly-hired PMETs.

Career Matching Services

WSG's Careers Connect and NTUC's e2i centres offer an expanded suite of career matching services tailored to jobseekers' needs. Jobseekers can seek advice from professionals to guide them in their job search, as well as in their career planning and development.

Employers can receive recruitment advice to uncover new talent and find the right people for their business needs.

Career Support Programme.

Companies can receive up to $42,000 in salary support for up to 18 months when they hire eligible Singapore Citizen Professionals, Managers, Executives and Technicians (PMETs) who are made unemployed for six months or more, or ≥40 years old and made redundant, in jobs that pay a gross monthly salary of at least $4,000 ($3,600 for SMEs).

Career Trial

Jobseekers can gain experience and confidence through a short-term career trial to be assessed for full-time jobs paying at least $1,500 (gross monthly salary) or part-time jobs paying at least $750. They will receive training allowance during the trial period and retention incentives if they stay on the job for more than three months.

Employers can assess a jobseeker's job fit via a short-term career trial before offering formal employment for full-time jobs paying at least $1,500 or part-time jobs paying at least $750. Companies can receive up to $5,400 of salary support to hire eligible Singapore Citizens who have been unemployed for 6 months or more.

My Careers Future

MyCareersFuture.sg is a portal which aims to provide Singaporean jobseekers with a fast and smart search service to match them with relevant jobs, based on the jobseekers' skills and competencies.

The portal enables Singaporeans to be more aware of the skills they possess, and connect them to relevant jobs based on their current skills and competencies. It also highlights jobs which are eligible for Government support through WSG's Adapt and Grow programmes.

Professional Conversion Programme

The PCP is a career conversion programme targeted at PMETs, including mid-career switchers, to undergo skills conversion and move into new occupations or sectors that have good prospects and opportunities for progression.

Initiatives and Schemes by:

■ SkillsFuture Singapore   ■ Workforce Singapore

Now that you have some idea of what a career in the WSH domain can offer and the available government initiatives and schemes to support your career goals, you are ready to take the next step!

NEW ENTRANTS

Use the Skills Framework for WSH to find out about careers in the sector

UNDERSTAND the career pathways and the attributes needed to take on a particular occupation in the sector

UNDERSTAND the skills and competencies required for the job role and identify relevant training programmes to help you become a qualified personnel

EXPERIENCED PROFESSIONALS

Use the Skills Framework for WSH to find out how to chart your career

PLAN for vertical career progression within the track that you are currently in, or for lateral career moves across the tracks

IDENTIFY skills gaps in your current or next job role

IDENTIFY relevant training programmes

TRAINING PROGRAMMES

Programmes that equip new entrants with skills and knowledge for specific occupations in the sector at their respective entry levels

Programmes for experienced employees or individuals to broaden or deepen specific skills and knowledge for various occupations in the sector

Embark on your career in WSH

Lifelong learning for skills deepening to meet existing and emerging demands of the sector

WSH Career Tracks and Skills Map

Operational Control

Develops and implements organisation's safety and health programmes and procedures, and conducts safety surveys and inspections. The jobs in this track conduct risk analysis to ensure compliance with statutory and legal requirements, and recommends appropriate corrective actions.

System Audit

Evaluates an organisation's WSH management system and identifies areas for improvement in order to make the relevant recommendations, and advises relevant stakeholders on WSH audit matters to ensure the organisation complies with statutory and legal requirements.

Corporate

Provides management direction and advocates WSH culture. Maintains and pursues continuous improvement in the organisation's WSH and Occupational Hygiene management systems across the region as well as manages all matters connected to safety and hygiene KPIs, policies, and strategies, including the legal requirements.

OPERATIONAL CONTROL

JOB ROLES	PAGE
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Health, Safety, Security & Environmental (HSSE) Coordinator

Muhamad Ithnin
Mighty Engineering & Construction Pte Ltd

LEADING BY EXAMPLE

Ithnin leads by example as a HSSE Coordinator. He develops health, safety and environment plans for each work site. Implementing and ensuring safe work procedures at the construction sites, Ithnin reports safety discrepancies to the project manager and recommends the appropriate corrective action, while undertaking assignments such as safety promotion campaigns and internal safety training. Besides the project manager, Ithnin liaises with the engineering and safety departments, and is the Lead HSSE for the team.

Ithnin draws his motivation from leading a team and growing team members to their best capabilities. His work is evaluated through ensuring a "zero recordable incident rate" in HSSE on site, and he is committed to investigating HSSE incidences, occupational disease or dangerous occurrences on site, for immediate rectification through coaching and education. He shares, "I like to create goals that we can achieve together as a team. Working together to achieve it and celebrating together makes it truly meaningful for me."

Ithnin is a people-person and a skilled communicator. He goes the extra mile in his work to help ensure safe living conditions in his workers' dormitories, organises company-wide dinners for them and volunteers as a mediator when it comes to employment matters. One of his most memorable moments on the job was presenting for the first time to over 1,000 workers and staff on Jurong Island in a mass toolbox meeting. "I had to overcome my stage-fright to do it," he tells us. "But it's another way I've grown unexpectedly in this role."

Ithnin obtained an Advanced Certificate in WSH in order to qualify as an HSSE Coordinator. He is most interested in learning about Confined Space HSE, Fire Safety Management, and hopes to become an Environmental Control Officer. He says, "The Skills Framework has made me aware of what I need and want to do in both the short and long term, which helps me set more definite and achievable goals."

> " The Skills Framework has made me aware of what I need and want to do in both the short and long term, which helps me set more definite and achievable goals. "

Workplace Safety and Health Manager

John Andrew
Smitech Engineering Pte Ltd

FULFILLING A COMMITMENT, A VOCATION

John oversees Smitech Engineering's safety department as a WSH Manager. His primary duty is to prevent incidents at the workplace that might cause harm to individuals, property or the environment. He makes sure that all company projects are accomplished with zero time-loss or injury in order to maintain an excellent safety track record that helps Smitech Engineering clinch projects such as the maintenance of Mechanical and Electrical systems at Changi Airport's new Terminal 4.

John assists the project management team in implementing and improving the company's Safety and Health Management System to meet legislative requirements. His work involves planning and reviewing risk assessments, fall protection and emergency rescue plans and safe work procedures. Daily activities include performing worksite inspections, surveys and audits to enforce safety and environmental compliance.

To drive safety functions, John has to be proficient in a wide range of methods and controls. He liaises and consults with WSH subordinates such as coordinators and supervisors, engineers, workers and top management alike, keeping communication clear and constant. Overseeing Smitech's Safety department, John establishes a communication framework where employees on all levels are kept in-the-loop and with access to report safety hazards.

Besides working with clients on a project's safety, health and environmental matters, one of John's key challenges is convincing and garnering commitment from internal stakeholders.

"Not everyone, whether it is the project team or management, will immediately agree with the procedures or a system that you propose," he stresses. "I ensure that they are able to see the value that our proposals add to the company, even though these measures aren't always operationally-related."

In his eleven years in the safety line, John has worked to upgrade his skills through safety-related courses and a degree in Safety, Health & Environment. He believes relevant work experience developed on the job is an asset.

In the future, John hopes to work as a regional WSH Manager, overseeing projects both locally and overseas. He says, "The Skills Framework will be a helpful guide in planning for skills deepening and upskilling".

> " I ensure that they (project team or management) are able to see the value that our proposals add to the company. "

Industrial Hygienist

Chong Lee Mei
Shell Petroleum Eastern Pte Ltd

ADDRESSING HAZARDS, HELPING PEOPLE

Lee Mei is an Industrial Hygienist in the Oil & Gas industry with Shell. Her role is to anticipate and recognise health hazards, whether chemical, physical (such as noise), biological or ergonomic (such as the set-up of an office work station), then study and evaluate risks to mitigate or remove those hazards.

Most of Lee Mei's work involves listening to and working with people on workplace processes and environments to protect them from potential health concerns. She says, "We aren't the experts of these tasks and systems, and different users could mean differing ways of approaching a task. It is prudent for me to see, speak with and understand how they do things, to know if our proposed control measures are truly workable."

Lee Mei considers her role an art. It involves performing qualitative studies through human interaction, exercising creativity and making sound judgment. Strong people skills are especially critical as she interacts with everyone from foreign transient workers to top management in her work, although she usually works independently to analyse her findings.

When a health concern arises, Lee Mei sometimes performs quantitative studies to translate the risk levels into figures and data, through field work measurements. Industrial Hygienists are professionals with scientific knowledge in the fields of Chemistry, Physics, Physiology and more.

Lee Mei estimates that she spends around 50% of her time performing field work, and recommends that an aspiring Industrial Hygienist be analytical and detail-oriented. She shares, "There are some who would be happy just to deal with data, but my true satisfaction comes from seeing how my work helps people go home safe and in good health."

Lee Mei holds a bachelor's degree in Chemical Engineering and a Master's degree in Safety, Health and Environment. She acquired relevant experience as a WSH Officer before qualifying as a Certified Industrial Hygienist with the American Board of Industrial Hygiene, as well as a Registered Industrial Hygienist with the Occupational and Environmental Health Society. Lee Mei feels the Skills Framework is especially useful in directing learners to Industrial Hygiene-related courses which they can take up to become certified, and plans to use it for knowledge refreshment and deepening, and to keep up with technological advances in her field.

> " **My true satisfaction comes from seeing how my work helps people go home safe and in good health.** "

Workplace Safety and Health Supervisor

JOB ROLE DESCRIPTION

The Workplace Safety and Health (WSH) Supervisor is responsible for conducting daily WSH compliance inspections at work sites. He/She assists in safety and health planning and organisation, identifying WSH hazards, evaluating and controlling risks, carrying out WSH inspections and conducting incident investigations and preparing reports. He may be expected to conduct internal trainings or briefings to facilitate safety compliance.

He is required to work on-site and work closely with operations and occupational hygiene team.

The WSH Supervisor is collaborative and demonstrates good teamwork in order to solve problems.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Deploy Workplace Safety And Health (WSH) programmes	• Assist in carrying out initiatives to support WSH programmes • Assist in conducting safety inductions and orientations • Explain WSH compliance requirements and proper work practices pertaining to subordinates' work	In accordance with: - Workplace Safety and Health Act
	Manage WSH performance	• Participate in WSH compliance inspections • Facilitate conduct of routine checks on work activities • Support collection of data on WSH performance, conditions and practices • Identify WSH non-compliance, unsafe work conditions and practices among subordinates' work activities and environment • Report instances of WSH non-compliance, unsafe work conditions and practices to team members • Deliver safety briefings to relevant stakeholder • Intervene in unsafe behaviours and work practices	
	Manage business continuity	• Coordinate subordinates' responses to incidents and accidents • Participate in emergency preparedness and response plans (EPRPs) when responding to emergency situations • Assist in conduct of emergency response drills	
	Develop Workplace Safety And Health management systems (WSHMS)	• Assist in executing work processes to establish scope of WSH risks • Assist to implement action-plans for WSHMS improvements • Assist with risk management (RM) plans for work processes and work areas • Assist RM and risk assessment (RA) teams within respective work processes and work areas	

Workplace Safety and Health Supervisor

TECHNICAL SKILLS AND COMPETENCIES			
Emergency Response Management	Level 2	Workplace Safety and Health Incident Management	Level 1
Hazards Identification	Level 1	Workplace Safety and Health Performance Management	Level 1
Technology Application	Level 2	Workplace Safety and Health Policy Development	Level 1
Workplace Safety and Health Culture Management	Level 2	Workplace Safety and Health System Management	Level 1

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Basic	Resource Management	Basic
Digital Literacy	Basic	Teamwork	Basic
Problem Solving	Basic		

Workplace Safety and Health Coordinator

JOB ROLE DESCRIPTION

The Workplace Safety and Health (WSH) Coordinator is responsible for coordinating health and safety systems in the organisation, and conducting periodic inspections to ensure that the implemented risk control measures are being observed and practised. He/She investigates and reports WSH incidents, and coordinates implementation of emergency preparedness and response plans.

He is required to work on-site in his course of work.

The WSH Coordinator is practical and meticulous. He is required to observe safety hazards and deal with them in a prompt and decisive manner.

	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
CRITICAL WORK FUNCTIONS AND KEY TASKS	Deploy Workplace Safety And Health (WSH) programmes	• Carry out initiatives to support WSH programmes • Conduct safety inductions and orientations • Explain WSH compliance requirements and proper work practices pertaining to employees' specific work processes or areas • Address and provide counsel on instances of WSH non-compliance and unsafe work practices	
	Manage WSH performance	• Participate in WSH compliance inspections • Conduct routine checks on work activities • Collect data on WSH performance, conditions and practices • Manage WSH non-compliance, unsafe work conditions and practices • Report instances of WSH non-compliance, unsafe work conditions and practices to team members • Support implementation of actions to improve WSH performance and control risks • Monitor effectiveness of implemented improvement actions	
	Manage business continuity	• Manage incidents and accidents promptly • Follow emergency preparedness and response plans (EPRPs) when responding to emergency situations • Alert team members of emergency situations and potential escalation of incidents and accidents • Conduct emergency response drills • Support WSH incident and accident investigations • Follow investigation protocols to collect data and report findings • Contribute suggestions to mitigate reoccurrences of incidents and accidents • Support implementation of corrective and preventive actions (CAPA)	In accordance with: - Workplace Safety and Health Act
	Develop Workplace Safety And Health management systems (WSHMS)	• Assess routine and non-routine work processes to establish scope of WSH risks • Implement action plans to implement WSHMS improvements • Execute risk management (RM) plans for work processes and work areas • Execute RM and risk assessment (RA) within respective work processes and work areas	

Workplace Safety and Health Coordinator

TECHNICAL SKILLS AND COMPETENCIES			
Emergency Response Management	Level 2, Level 3	Workplace Safety and Health Management in Manufacturing Industry	Level 2, Level 3
Hazards Identification	Level 2, Level 3	Workplace Safety and Health Management in Marine Industry	Level 2, Level 3
Internet of Things Management	Level 2	Workplace Safety and Health Management in Service Industry	Level 2, Level 3
Technology Application	Level 3	Workplace Safety and Health Performance Management	Level 2, Level 3
Workplace Safety and Health Culture Management	Level 2, Level 3	Workplace Safety and Health Policy Development	Level 2, Level 3
Workplace Safety and Health Incident Management	Level 2, Level 3	Workplace Safety and Health Supervision in Tunnelling Construction	Level 2, Level 3
Workplace Safety and Health Management in Chemical, Process, Pharmaceutical Industries and Laboratories	Level 2, Level 3	Workplace Safety and Health System Management	Level 2, Level 3
Workplace Safety and Health Management in Construction Industry	Level 2, Level 3		

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Intermediate	Resource Management	Basic
Decision Making	Basic	Teamwork	Intermediate
Problem Solving	Basic		

Workplace Safety and Health Officer

JOB ROLE DESCRIPTION

The Workplace Safety and Health (WSH) Officer is responsible for developing and monitoring organisation's safety programmes and procedures. He/She conducts safety surveys and inspections, and recommends appropriate corrective actions. He conducts risk analysis and ensures compliance with statutory and legal requirements.

He may be required to work on-site in his course of work.

The WSH Officer has good teamwork, is analytical and collaborative in order to solve problem.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Deploy Workplace Safety And Health (WSH) programmes	• Implement Workplace Safety and Health Management System (WSHMS) and risk management (RM) plans • Implement programmes to steer WSH culture, habits and norms of the organisation • Clarify WSH programme requirements with employees of other departments • Develop WSH training programmes and conduct trainings for safety-critical roles	
	Manage WSH performance	• Carry out WSH compliance inspections • Support audit process • Coach team members on how to conduct routine checks on work activities • Analyse data on WSH performance, conditions and practices • Evaluate WSH non-compliance, unsafe work conditions and practices to identify WSH performance gaps • Evaluate impact of health and safety hazards, including personal risk factors to employees' safety and prioritise issues based on severity • Report findings of WSH compliance inspections and routine checks • Recommend and implement actions to improve WSH performance and control risks • Review effectiveness of implemented improvements on an on-going basis	In accordance with: - Workplace Safety and Health Act
	Manage business continuity	• Implement emergency preparedness and response plans (EPRPs) and communicate plans to stakeholders • Coordinate EPRP drills and maintenance of emergency response equipment • Conduct WSH incident and accident investigations • Review investigation findings to identify causes of incidents and accidents • Propose corrective and preventive measures to address root cause of incidents • Prepare incident and accident reports • Monitor implementation of corrective and preventive actions (CAPA)	

Workplace Safety and Health Officer

	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
CRITICAL WORK FUNCTIONS AND KEY TASKS	Develop Workplace Safety And Health management systems (WSHMS)	• Coordinate WSH programme initiatives • Develop and deliver safety briefings • Conduct document reviews of WSHMS reports • Identify areas for improvement in the WSHMS • Monitor implementation progress of recommended WSHMS improvements • Stay abreast of legislative requirements and alert of any changes • Develop risk management (RM) plans for work processes and work areas • Establish RM and risk assessment (RA) teams within respective work processes and work areas	In accordance with: - Workplace Safety and Health Act

TECHNICAL SKILLS AND COMPETENCIES			
Behavioural Safety Management	Level 5	Workplace Safety and Health Audit System Management	Level 5
Business Presentation Delivery	Level 5	Workplace Safety and Health Business Case Development	Level 4, Level 5
Change Management	Level 3	Workplace Safety and Health Control Measures	Level 4, Level 5
Emergency Response Management	Level 4, Level 5	Workplace Safety and Health Culture Management	Level 4, Level 5
Financial Budgeting	Level 5	Workplace Safety and Health Incident Management	Level 4, Level 5
Hazards Identification	Level 4, Level 5	Workplace Safety and Health Management in Chemical, Process, Pharmaceutical Industries and Laboratories	Level 4, Level 5
Human Factors in Job Design	Level 4, Level 5	Workplace Safety and Health Management in Construction Industry	Level 4, Level 5
Innovation Management	Level 3	Workplace Safety and Health Management in Manufacturing Industry	Level 4, Level 5
Internet of Things Management	Level 3	Workplace Safety and Health Management in Marine Industry	Level 4, Level 5
Project Coordination	Level 3	Workplace Safety and Health Management in Service Industry	Level 4, Level 5
Risk Management	Level 5	Workplace Safety and Health Performance Management	Level 4, Level 5
Stakeholder Management	Level 3	Workplace Safety and Health Policy Development	Level 4, Level 5
Technical Writing	Level 4, Level 5	Workplace Safety and Health System Management	Level 4, Level 5
Technology Application	Level 3		

Workplace Safety and Health Officer

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Intermediate	Resource Management	Basic
Decision Making	Intermediate	Teamwork	Intermediate
Problem Solving	Intermediate		

Senior Workplace Safety and Health Officer

JOB ROLE DESCRIPTION

The Senior Workplace Safety and Health (WSH) Officer maintains the organisation's WSH Management System (WSHMS) by managing WSH administrative processes, identifying training needs, designing and conducting training effectively, and using a range of WSH tools and resources to implement WSH programmes and drive compliance.

He/She may be expected to supervise a WSH team and work with internal and external stakeholders to accomplish his work.

He is analytical and values teamwork and collaboration in order to solve problems.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Deploy Workplace Safety And Health (WSH) programmes	• Develop WSH programme initiatives to promote compliance with WSH procedures • Develop programs to steer the WSH culture, habits and norms of the organisation • Set up WSH programme steering and working committees • Communicate importance of WSH programme compliance to team members of other departments • Discuss barriers in complying with WSH policies and procedures with team members of other departments • Propose improvements to WSH programmes and training programmes • Evaluate outcomes of implementing WSH programmes	In accordance with: - Workplace Safety and Health Act
	Manage WSH performance	• Plan WSH compliance inspections and routine checks • Facilitate audit process • Determine data collection and analysis requirements to measure WSH performance • Develop WSH performance criteria and targets in collaboration with team members • Assess performance metrics to determine WSH performance improvement strategies • Evaluate impact of health and safety hazards, including personal risk factors to employees' safety and prioritise issues based on severity • Evaluate effectiveness of WSHMS, WSH programmes and EPRP improvements • Develop criteria for assessing effectiveness of WSHMS, WSH programmes and emergency preparedness and response plans (EPRPs)	

Senior Workplace Safety and Health Officer

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Manage business continuity	• Maintain EPRP processes • Organise reviews and collect stakeholder feedback on the EPRP • Recommend improvements to the EPRP • Manage incident and accident investigations, data analyses and reporting • Assess root cause of incidents and accidents • Review corrective and preventive actions (CAPA) measures proposed by team members • Revise incident and accident reports prepared by team members	In accordance with: - Workplace Safety and Health Act
	Develop Workplace Safety And Health management systems (WSHMS)	• Manage risk management (RM) plans and strategies for work processes and work areas • Manage RM and risk assessment (RA) teams within respective work processes and work areas • Advise RM and RA teams on implementing WSHMS within the scope of their work areas • Revise RM plans based on feedback from RM and RA teams • Propose improvements to WSHMS • Develop action plans to implement WSHMS improvements	
	Establish Workplace Safety And Health (WSH) policies and procedures	• Assess established WSH policies and objectives • Develop WSH procedures in collaboration with team members • Facilitate implementation of WSH policies through application of WSH procedures • Propose improvements to WSH policies and procedures • Implement and monitor closure of recommended WSH policy improvement actions	
	Manage people and organisational function	• Collaborate with team members to deliver high performance services • Suggest areas of technical and business management training development • Optimise utilisation of resources • Acquire and allocate resources to support operations • Provide suggestions for tweaks to business processes and operations to support change management initiatives • Support negotiations with key internal and external stakeholders • Conduct modelling and forecasting analyses • Track employees' performance by utilising performance monitoring systems	

Senior Workplace Safety and Health Officer

TECHNICAL SKILLS AND COMPETENCIES			
Behavioural Safety Management	Level 5	Stakeholder Management	Level 4
Business Negotiation	Level 4	Technical Writing	Level 5
Business Presentation Delivery	Level 5	Technology Application	Level 4
Change Management	Level 3	Technology Infrastructure Management and Integration	Level 3
Cloud Computing Application	Level 3	Workplace Safety and Health Audit System Management	Level 5
Conflict Resolution	Level 4	Workplace Safety and Health Business Case Development	Level 5
Corporate Governance	Level 4	Workplace Safety and Health Control Measures	Level 5
Data Synthesis	Level 3	Workplace Safety and Health Culture Management	Level 6
Emergency Response Management	Level 5	Workplace Safety and Health Incident Management	Level 5
Financial Budgeting	Level 5	Workplace Safety and Health Management in Chemical, Process, Pharmaceutical Industries and Laboratories	Level 5
Hazards Identification	Level 5	Workplace Safety and Health Management in Construction Industry	Level 5
Human Factors in Job Design	Level 5	Workplace Safety and Health Management in Manufacturing Industry	Level 5
Innovation Management	Level 4	Workplace Safety and Health Management in Marine Industry	Level 5
Internet of Things Management	Level 3	Workplace Safety and Health Management in Service Industry	Level 5
Project Coordination	Level 4	Workplace Safety and Health Performance Management	Level 5
Risk Management	Level 5	Workplace Safety and Health Policy Development	Level 5
Staff Performance Management	Level 3	Workplace Safety and Health System Management	Level 5

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Intermediate	Resource Management	Basic
Decision Making	Intermediate	Teamwork	Intermediate
Problem Solving	Intermediate		

Workplace Safety and Health Manager

JOB ROLE DESCRIPTION

The Workplace Safety and Health (WSH) Manager is responsible for reviewing WSH policies and practices to ensure that they are current and relevant. He/She advises the management team on WSH issues. He manages and reviews WSH policies, standards, procedures and the Workplace Safety and Health Management System (WSHMS) in accordance with business needs, including analysis of the WSH performance and allocating resources to improve WSH performance. He is also responsible for managing WSH business resources including manpower, internal assets and external vendors.

In addition, he provides technical advice and support to other departments on WSH issues. He leads a department and makes business decisions independently.

He is analytical, collaborative and demonstrates good teamwork.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Deploy Workplace Safety And Health (WSH) programmes	• Maintain data management systems to collect and record WSH information • Facilitate management practices and projects conducted to improve organisational culture maturity level • Prepare training materials and documented information to impart WSH skills and awareness in workers and supervisors • Drive communication and consultation implementation processes for WSH-related matters for all stakeholders • Drive WSH training and WSH-related skill development for all supervisors and workers	In accordance with: – Workplace Safety and Health Act
	Manage WSH performance	• Implement activities to monitor WSH performance with consideration to organisation's business goals and vision at strategic and operational levels • Participate in WSH compliance and management system audits • Report effectiveness of risk management and WSH management processes • Manage processes and procedures for investigation, analysis and reporting of incidents and nonconformities • Monitor effectiveness of risk controls • Evaluate impact of health and safety hazards, including personal risk factors to employees' safety and prioritise issues based on severity • Support periodic management reviews to assess, monitor and identify areas of improvement in WSH strategy, management system and culture	
	Manage business continuity	• Manage emergency drills • Gather evidences and conduct interviews for incident and accident reports	

Workplace Safety and Health Manager

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Develop Workplace Safety And Health management systems (WSHMS)	• Support implementation and monitor compliance with accordance to organisation's WSH management system, policy and procedures • Identify resources required for WSH management and work within allotted resource • Drive development of risk management (RM) plans and strategies for work processes and work areas • Convince line management to demonstrate WSH leadership as role models to workers and prioritise WSH in relation to other operational priorities • Facilitate strategic and operational plans to address and improve control of WSH hazards, risks and costs	
	Establish Workplace Safety And Health (WSH) policies and procedures	• Conduct risk assessment for all tasks and working conditions • Participate in analysis of hazard information to identify root cause, consequences, feasible risk control measures and contingency measures for all relevant hazards in the workplace • Identify requirements for compliance with WSH-related regulations and standards • Implement appropriate actions to stop unsafe work • Develop effective procedures for safe working in collaboration with operational staff	In accordance with: - Workplace Safety and Health Act
	Manage people and organisational function	• Develop relationships with supervisors and middle managers to support WSH development relevant to their roles • Provide relevant and up-to-date WSH information to middle managers, supervisors and workers • Provide WSH advice to middle managers, supervisors and workers • Provide leadership in WSH and act as a role model of good WSH practice and professionalism to management, co-workers and other stakeholders • Support implementation of change process to minimise adverse effects and improve WSH • Update internal and external WSH information, regulations, standards and good practices related to the organisation	
	Establish quality management policies and procedures	• Oversee order and purchase of Personal Protection Equipment (PPE) and risk controls • Conduct workplace inspection activities to validate the use of risk controls • Monitor employees and contractors to ensure they comply with WSH requirements • Update internal and external WSH information, regulations, standards and good practices related to the organisation	

Workplace Safety and Health Manager

TECHNICAL SKILLS AND COMPETENCIES			
Behavioural Safety Management	Level 6	Technical Writing	Level 5
Business Negotiation	Level 4	Technology Application	Level 4
Business Presentation Delivery	Level 6	Technology Infrastructure Management and Integration	Level 4
Change Management	Level 4	Workplace Safety and Health Audit System Management	Level 5
Cloud Computing Application	Level 4	Workplace Safety and Health Business Case Development	Level 5
Conflict Resolution	Level 5	Workplace Safety and Health Control Measures	Level 5
Corporate Governance	Level 5	Workplace Safety and Health Culture Management	Level 6
Data Synthesis	Level 5	Workplace Safety and Health Incident Management	Level 5
Emergency Response Management	Level 5	Workplace Safety and Health Management in Chemical, Process, Pharmaceutical Industries and Laboratories	Level 5
Financial Budgeting	Level 5	Workplace Safety and Health Management in Construction Industry	Level 5
Hazards Identification	Level 5	Workplace Safety and Health Management in Manufacturing Industry	Level 5
Human Factors in Job Design	Level 5	Workplace Safety and Health Management in Marine Industry	Level 5
Innovation Management	Level 5	Workplace Safety and Health Management in Service Industry	Level 5
Internet of Things Management	Level 4	Workplace Safety and Health Performance Management	Level 5
Project Coordination	Level 4	Workplace Safety and Health Policy Development	Level 5
Risk Management	Level 5	Workplace Safety and Health System Management	Level 5
Stakeholder Management	Level 4		

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Intermediate	Resource Management	Intermediate
Decision Making	Intermediate	Teamwork	Intermediate
Problem Solving	Intermediate		

Occupational Hygiene Officer

JOB ROLE DESCRIPTION

The Occupational Hygiene Officer is responsible for identifying, assessing and advising on risks arising from the workplace or work processes, recommending measures to eliminate or minimise and control the risks, and implementing the measures. He/she is also responsible for preventing or reducing health and environmental risks, and improving quality of processes.

He is expected to supervise a quality team and work with internal and external stakeholders to accomplish his work. The Occupational Hygiene Officer is expected to be analytical, resourceful and has good teamwork and collaborative skills in order to solve problems.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Analyse health hazards at the workplace	• Develop Occupational Hygiene (OH) assessments, audits and inspections for the workplace • Develop OH trainings for employees • Analyse OH surveys • Analyse statistical data and technical reports • Maintain the implementation of OH systems operations • Design appropriate strategies for health hazard prevention	
	Administer staff and organisational development	• Identify opportunities for continuous improvement • Initiate the implementation of continuous improvement initiatives and activities	
	Deploy OH programmes	• Carry out initiatives to eliminate risks in OH programmes • Implement standard operating procedures for OH compliance requirements • Review effectiveness of implemented improvements on an on-going basis	In accordance with: - Workplace Safety and Health Act
	Manage OH performance	• Collect measurements to assess the effectiveness of local exhaust ventilation systems • Implement targeted instances of OH non-compliance, unsafe work conditions and practices • Monitor effectiveness of OH improvement actions • Identify OH non-compliance, unsafe work conditions and practices • Evaluate impact of health hazards on employees' safety and prioritise issues based on severity	

TECHNICAL SKILLS AND COMPETENCIES

Asbestos Removal	Level 5	Innovation Management	Level 4
Asbestos Risk Management	Level 5	Internet of Things Management	Level 3
Biological Hazards Management	Level 5	Local Exhaust Ventilation System Management	Level 2, Level 3
Change Management	Level 3	Noise and Vibration Control	Level 5
Cloud Computing Application	Level 3	Noise and Vibration Monitoring	Level 5
Confined Space Management	Level 4, Level 5	Project Coordination	Level 4
Conflict Resolution	Level 4	Radioactive Materials and Irradiating Apparatus Management	Level 5
Corporate Governance	Level 4	Skin Exposure Risk Management	Level 5
Data Synthesis	Level 3	Staff Performance Management	Level 3
Ergonomic Hazards Management	Level 5	Stakeholder Management	Level 4
Exposure and Risk Measurement	Level 5	Technical Writing	Level 5
Hazard Control in Laser Devices	Level 5	Technology Application	Level 3
Hazardous Substances Impact Evaluation	Level 5	Technology Infrastructure Management and Integration	Level 3
Hazardous Substances Management	Level 5	Thermal Stressors Management	Level 5
Indoor Air Quality Management	Level 5	Workplace Health Management	Level 5

GENERIC SKILLS AND COMPETENCIES (TOP 5)

Communication	Intermediate	Resource Management	Basic
Decision Making	Intermediate	Teamwork	Intermediate
Problem Solving	Basic		

Occupational Hygienist

JOB ROLE DESCRIPTION

The Occupational Hygienist is responsible for developing and implementing hygiene programmes in the organisation. He/She is responsible for recommending measures to eliminate or minimise and control the risks, and leads in implementing the control measures.

In addition, he is also responsible for preventing or reducing health and environmental risks, and improving quality of processes. The Occupational Hygienist is analytical and observant in order to identify and analyse health risks.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Analyse health hazards at the workplace	• Analyse inspection reports to ensure compliance with the systems, guidelines and codes of practice • Review Occupational Hygiene (OH) trainings to ensure relevancy and currency • Formulate OH surveys' objectives and outcomes • Review statistical data and technical reports • Identify and capture emerging trends from gap analyses and propose implementable early interventions • Implement appropriate strategies for health hazard prevention • Propose implementable early interventions for anticipated gaps in OH systems	
	Administer staff and organisational development	• Propose opportunities for continuous improvement • Oversee the implementation of continuous improvement initiatives and activities • Assist in coaching and mentoring of staff • Propose improvements to OH policies and procedures • Review OH trainings	In accordance with: - Workplace Safety and Health Act
	Deploy OH programmes	• Develop initiatives to eliminate risks in OH programmes • Review standard operating procedures for OH compliance requirements • Propose improvements to OH programmes and training programmes • Develop OH programme initiatives to promote compliance	
	Manage OH performance	• Evaluate on-going strategies on instances of OH non-compliance, unsafe work conditions and practices • Evaluate effectiveness of OH improvement actions • Evaluate OH non-compliance, unsafe work conditions and practices to identify OH performance gaps • Evaluate measurements to assess the effectiveness of local exhaust ventilation systems • Recommend OH initiatives to improve employees' safety and prioritise issues based on severity	

Occupational Hygienist

TECHNICAL SKILLS AND COMPETENCIES

Asbestos Removal	Level 5	Innovation Management	Level 5
Asbestos Risk Management	Level 5	Internet of Things Management	Level 4
Biological Hazards Management	Level 6	Local Exhaust Ventilation System Management	Level 2, Level 3
Change Management	Level 4	Noise and Vibration Control	Level 5
Cloud Computing Application	Level 4	Noise and Vibration Monitoring	Level 5
Confined Space Management	Level 5	Project Coordination	Level 5
Conflict Resolution	Level 5	Radioactive Materials and Irradiating Apparatus Management	Level 6
Corporate Governance	Level 5	Skin Exposure Risk Management	Level 6
Data Synthesis	Level 4	Staff Performance Management	Level 4
Ergonomic Hazards Management	Level 6	Stakeholder Management	Level 5
Exposure and Risk Measurement	Level 5	Technical Writing	Level 5
Hazard Control in Laser Devices	Level 6	Technology Application	Level 4
Hazardous Substances Impact Evaluation	Level 6	Technology Infrastructure Management and Integration	Level 4
Hazardous Substances Management	Level 6	Thermal Stressors Management	Level 6
Indoor Air Quality Management	Level 6	Workplace Health Management	Level 6

GENERIC SKILLS AND COMPETENCIES (TOP 5)

Communication	Intermediate	Resource Management	Intermediate
Decision Making	Intermediate	Teamwork	Intermediate
Problem Solving	Intermediate		

Notes

SYSTEM AUDIT

Assistant Vice President/Auditor

Lim Yee Teng
TÜV SÜD PSB Pte Ltd

PURSUING A CAREER WITH PASSION

Yee Teng has been a Workplace Safety and Health (WSH) professional since 2004, when an appointment to manage occupational safety and health (OSH) at work sparked the former engineer's fascination with the field.

He shares, "I realised that all work processes have close interrelation with WSH principles. My auditing role is interesting because it involves learning about and understanding companies' processes and providing them with values for improvements and a safer environment."

To date, the enthusiastic lifelong learner has completed most WSH courses relevant to his current practices, including a WSQ Graduate Certificate in WSH Professionals, a Master's in Environmental Science, a WSQ Specialist Diploma in Occupational Hygiene, and an Advanced Certification in Training & Assessment. His best advice to others is to "not limit yourself to the same industry." He states, "Learning about new industries to understand the different work processes, activities, and risks and hazards, can help you move to different roles, and new levels of WSH challenges."

Yee Teng feels that the Skills Framework provides a consistent competency evaluation system for WSH professionals, and is a great way to keep up-to-date with industry developments and find career and knowledge-sharing opportunities. "It gives entry-level and industry veterans the confidence to embrace new challenges and upgrade more easily in a structured manner," he offers.

Currently, Yee Teng's roles and responsibilities include developing, managing and performing various quality assurance activities in WSH and laboratory systems within TÜV SÜD's legal entities. He needs to plan and conduct conformity assessments in local and overseas subsidiaries, plus train employees in systems such as OHSAS 18001 and ISO 9001, to qualify them as internal auditors.

"My work helps monitor, control and minimise employee risk to hazards and improve performance. Having technical and engineering experience is important to understand the purpose of the safety control measures we implement," he says. One of Yee Teng's biggest challenges is convincing internal stakeholders that WSH recommendations add value to work processes that they have been performing for years. Yet, he says, smiling, "Cases where we go from not having a safety management system to seeing colleagues reciprocate your commitment by achieving certification and taking charge of their personal safety at work beyond legal compliance, really gives me a sense of fulfilment and satisfaction."

> **"**
> **The Skills Framework gives entry-level and industry veterans the confidence to embrace new challenges and upgrade more easily in a structured manner.**
> **"**

Workplace Safety and Health Auditor

JOB ROLE DESCRIPTION

The Workplace Safety and Health (WSH) Auditor is responsible for preparing audit plans, conducting audits and interviews, and submitting audit reports. He/she is responsible for evaluating organisations' WSH management systems, identifying areas for improvement, making the relevant recommendations and monitoring the progress of improvements.

In addition, he is expected to conduct physical inspections of workplaces to collect and verify information in accordance to the audit plans.

The WSH Auditor is analytical, resourceful, collaborative and has good teamwork.

	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
CRITICAL WORK FUNCTIONS AND KEY TASKS	Administer staff and organisational development	• Propose opportunities for continuous improvement • Implement continuous improvement initiatives and activities • Assist in coaching and mentoring of staff • Propose improvements to auditing policies and procedures • Participate in negotiations with relevant key internal and external stakeholders	In accordance with: – Workplace Safety and Health Act
	Establish audit plans	• Maintain certification processes and procedures • Manage correspondences, communication and engagement plans with clients • Develop new audit processes and procedures for auditees	
	Conduct external management systems audits	• Conduct external Workplace Safety And Health (WSH) management systems audits • Perform audits on management systems against the relevant standards • Evaluate audit findings for accuracy and relevance to audit objectives • Compile audit reports • Perform follow-up audits and reviews • Make recommendations for improvement to auditees	

Workplace Safety and Health Auditor

TECHNICAL SKILLS AND COMPETENCIES			
Change Management	Level 3	Stakeholder Management	Level 4
Conflict Resolution	Level 4	Workplace Safety and Health Audit Programme Management	Level 5, Level 6
Corporate Governance	Level 4	Workplace Safety and Health Audit System Management	Level 6
Innovation Management	Level 4	Workplace Safety and Health Culture Management	Level 6
Project Coordination	Level 4	Workplace Safety and Health Performance Management	Level 6
Risk Management	Level 6	Workplace Safety and Health Policy Development	Level 6
Staff Performance Management	Level 3	Workplace Safety and Health System Management	Level 6

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Intermediate	Resource Management	Basic
Decision Making	Intermediate	Teamwork	Intermediate
Problem Solving	Basic		

Lead Workplace Safety and Health Auditor

JOB ROLE DESCRIPTION

The Lead Workplace Safety and Health (WSH) Auditor is responsible for leading the audit teams in conducting WSH audits for client organisations. He/She is responsible for advising relevant stakeholders on WSH audit matters.

The Lead WSH Auditor is collaborative, analytical, resourceful, demonstrates good teamwork and is a good facilitator.

	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
CRITICAL WORK FUNCTIONS AND KEY TASKS	Administer staff and organisational development	• Manage department level resources and budgets • Lead implementation of continuous improvement initiatives and activities • Mentor staff • Recommend improvements to auditing policies and procedures • Lead negotiations with relevant key internal and external stakeholders • Drive departmental performance to achieve organisational goals	In accordance with: - Workplace Safety and Health Act
	Establish audit plans	• Manage the certification processes for each client and make certification decisions • Manage correspondences, communication and engagement plans with clients • Review new audit processes and procedures for auditees	
	Conduct external management systems audits	• Lead and manage auditing teams in external WSH management systems audits • Lead audits and evaluate management systems against the relevant standards • Evaluate audit reports for accuracy and relevance to audit objectives • Oversee final audit reports for issuance • Lead audit teams on follow-up audits and reviews • Drive recommendations for improvement to auditees • Lead audit opening and closing presentations	

Lead Workplace Safety and Health Auditor

TECHNICAL SKILLS AND COMPETENCIES			
Change Management	Level 4	Stakeholder Management	Level 5
Conflict Resolution	Level 5	Workplace Safety and Health Audit Programme Management	Level 6
Corporate Governance	Level 5	Workplace Safety and Health Audit System Management	Level 6
Innovation Management	Level 5	Workplace Safety and Health Culture Management	Level 6
Project Coordination	Level 5	Workplace Safety and Health Performance Management	Level 6
Risk Management	Level 6	Workplace Safety and Health Policy Development	Level 6
Staff Performance Management	Level 4	Workplace Safety and Health System Management	Level 6

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Intermediate	Resource Management	Intermediate
Decision Making	Intermediate	Teamwork	Intermediate
Problem Solving	Intermediate		

CORPORATE

Director, Environmental, Health & Safety (EHS)

Howard How
Boustead Projects E&C Pte Ltd

STAYING NIMBLE TO DISRUPTION

Industry recognition of Boustead Projects as a leader in Workplace Safety and Health (WSH) is chief among Howard's priorities as Director for Environmental, Health & Safety. He shares, "Having high WSH standards adds value to our work by ensuring smooth and efficient progress, which is important to both our clients and contractors." Helping Boustead Projects become one of the WSHC eight industry bizSAFE Mentors, and being the only WSH Officer awardee in the WSH Awards 2010 organised by the WSHC and Ministry of Manpower, stand among Howard's proudest achievements.

In his role, Howard is in charge of meeting WSH requirements at all Boustead Projects work sites, as well as overseeing the various management systems across the company for quality, environment and Occupational Health & Safety. He says, "WSH covers things like project and construction management these days. Putting systems in good order and maintaining their development through annual reviews help ensure their true effectiveness."

According to Howard, passion and not experience is the true determinant of one's performance. "Experience is important, but that can be developed when you are committed to doing your work well," Howard points out. "I see my role as having a moral responsibility to ensure our workers go home safely. I wanted to be a doctor as a child, and even though I don't heal others for a living today, I am important in preventing accidents and injury." Besides attitude, Howard thinks it is highly essential to be familiar with WSH regulations to do well in his role. This includes knowing what the regulations are and how they should correctly be applied. Being an active participant in industry events helps Howard stay alert to industry developments and disruptors, keeping Boustead Projects nimble to the changes.

"We are tackling manpower issues with technology these days, and increased digitalisation means new standards and norms in how things are done," he offers. He adds, "It is important to understand how these new technologies and concepts are going to affect you, and implement measures so you can be part of the change too." Howard is a proponent of the Skills Framework for those starting out in the industry, and feels it helps them work towards their career progression in WSH with greater confidence.

> " We are tackling manpower issues with technology these days, and increased digitalisation means new standards and norms in how things are done. "

Vice President (Environmental, Health & Safety)

Mohamad Zahid Bin Wagiman
ST Engineering Marine Ltd

FINDING STRENGTH IN DIVERSITY

Mohamad Zahid manages the Environment, Health and Safety (EHS) team of ST Engineering's Marine and Environmental Engineering services, defining its strategic business direction and driving organisational business performance in areas of EHS.

He holds a degree in Operational Safety, Health and Environment, a Workplace Safety and Health Officer certification from Ministry of Manpower, and possesses more than 15 years relevant hands-on experience, plus knowledge in industry-specific topics such as vessels' hot work, oil pollution control, confined space inspection, and firefighting and rescue. Applying both his knowledge and experience allows Zahid to effectively direct the business' compliance and corporate governance through informed interpretation and problem-solving implementation of WSH Act and Subsidiary Legislations.

Besides staying abreast of regulatory and legislative requirements, Zahid also works to improve productivity and create a safer and healthier workplace culture. He explores and adopts the best practices and innovation available in EHS for his company through engagement and collaboration with local and global industry players.

He cites his 27 years of EHS experience in the Manufacturing, Construction, Oil & Gas and Marine & Offshore industries— both locally and overseas—as essential in providing him the confidence and insights to contribute to ST Engineering Marine's strategic planning.

Zahid heads a 42-man team that is responsible for a workforce of more than 4,000 employees. The top executive stresses that his is "not a deskbound job", and asserts, "You need to 'walk the talk'. It can be easy to forget that it is the people that make up your work environment—not just equipment and tools," Zahid says. "Our workforce today is very diverse with employees from all walks of life, different ethnic groups and cultures, holding varying job grades and operating in highly-intense work environments. One must be an effective communicator with the ability to initiate, influence and inspire EHS excellence in colleagues."

For the future, Zahid is preparing his team to undertake challenging assignments in new and diversified projects in environmental engineering, rig building and repair, and Superyacht, both locally and overseas. "The Skills Framework will help identify technology such as modern predictive analytics, and enhance individuals' learning about critical hazards related to high-risk industries," he shares.

> " It can be easy to forget that it is the people that make up your work environment—not just equipment and tools. "

Director/ Senior Regional Manager/ Senior Corporate Manager

JOB ROLE DESCRIPTION

The Director/Senior Regional Manager/Senior Corporate Manager is responsible for providing management direction and promoting Workplace Safety and Health (WSH) and Occupational Hygiene (OH) culture across the region. He/She also assists in maintaining and seeking continuous improvement in the organisation's WSH and OH management systems across the region. He advises management on all matters connected to safety and hygiene key performance indicators (KPIs), policies and strategies, including the legal requirements for the region.

The Director/Senior Regional Manager/Senior Corporate Manager is a strategic thinker with excellent business acumen. He is decisive, results-driven and demonstrates exceptional leadership and communication abilities to achieve organisational level WSH and OH goals.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Define strategic business direction	• Support development of organisational business goals • Identify new opportunities within defined business verticals • Define medium-term strategic plans to expand current businesses • Review operational strategies, policies and targets across business verticals • Develop corporate governance standards and practices for business verticals based on organisational policies and guidelines in alignment with codes of corporate governance and relevant regulatory requirements	In accordance with: - Workplace Safety and Health Act
	Drive organisational business performance	• Support development of business performance indicators and measurement standards across the organisation • Review business performance against plans • Identify principal risks to the organisation • Advise the management teams regularly on business conditions, based on commercial information and actual financial performance against budgets and evaluation of variances	
	Promote workplace safety and health	• Ensure the implementation of Workplace Safety and Health (WSH) standards across the business verticals • Support development of WSH policies and procedures • Mitigate and resolve WSH-related escalations	
	Lead people	• Collaborate with business heads to identify areas of technical and business management training development • Establish performance indicators to benchmark against effectiveness of learning and development programs based on industry best standards • Support the development of organisation's employee development systems • Use performance management processes as tools for supporting employee development and improvement • Implement succession planning initiatives for key management positions and business heads • Suggest strategies in attracting new employees based on business objectives and regulatory standards	

Director/ Senior Regional Manager/ Senior Corporate Manager

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Grow business and stakeholder relationships	• Manage relationships with business stakeholders, government agencies, media, academia and customers through focused initiatives • Establish key stakeholder relationship management audit processes and criteria • Conduct key stakeholder analyses to identify key internal and external stakeholders • Develop frameworks for managing conflicts, grievances and disputes • Review business expansion proposals • Identify new business growth opportunities to strengthen organisation's position in the marketplace • Evaluate internal work capacity requirements to identify potential areas of new business opportunities	In accordance with: - Workplace Safety and Health Act
	Strive for continuous improvement	• Establish systems to support innovation within the organisation • Develop business readiness plans, considering resources, other elements, capabilities and activities required for effective change transitions • Implement operational risk management policies and processes	

TECHNICAL SKILLS AND COMPETENCIES

Business Negotiation	Level 5	Innovation Management	Level 6
Change Management	Level 5	Internet of Things Management	Level 5
Cloud Computing Application	Level 5	Project Coordination	Level 5
Conflict Resolution	Level 6	Staff Performance Management	Level 5
Corporate Governance	Level 6	Stakeholder Management	Level 5
Data Synthesis	Level 5	Technology Infrastructure Management and Integration	Level 5
Financial Budgeting	Level 6		

GENERIC SKILLS AND COMPETENCIES (TOP 5)

Decision Making	Advanced	Problem Solving	Advanced
Interpersonal Skills	Advanced	Resource Management	Advanced
Leadership	Advanced		

Senior Vice President/Vice President/Assistant Vice President

JOB ROLE DESCRIPTION

The Senior Vice President/Vice President/Assistant Vice President establishes the overall strategies and direction of the organisation with a view of growing its business and driving its competitiveness in a globalised environment. He/She ensures the strategic alignment of business plans with the organisation's vision, mission and business objectives. He directs compliance and corporate governance, ensuring that the organisation stays abreast of changes in regulatory and legislative requirements, and advocates a safe workplace culture across the organisation.

The Senior Vice President/Vice President/Assistant Vice President oversees all operations, provides leadership, and drives continuous improvement through innovation, safety, productivity and efficiency initiatives. He builds strong networks with diverse stakeholders with a view of advancing the organisation's interests. In addition, he drives organisational capability development and succession planning to ensure a competent workforce and continuous talent pipeline.

The Senior Vice President/Vice President/Assistant Vice President is a calculated risk-taker and strategic thinker with excellent business acumen. He is decisive, results-driven and demonstrates exceptional leadership and communication abilities.

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Define strategic business direction	• Steer the organisation to achieve excellence in a globalised environment • Set organisational business goals for high performance and growth • Develop long-term strategic business plans to maintain a leading position in the marketplace • Facilitate alignment of business strategies with organisation's overall vision, mission and values • Ensure organisational compliance to regulatory requirements and legislation and keep abreast of changes in compliance requirements • Drive organisational development with respect to change, innovation and knowledge to achieve desired strategic business goals	In accordance with: - Workplace Safety and Health Act
	Drive organisational business performance	• Establish organisational business performance indicators and measurement standards • Review organisational business performance against plans to recognise achievements • Assess principal risks to the organisation • Ensure organic and inorganic profitable revenue growth	
	Promote workplace safety and health	• Promote Workplace Safety and Health (WSH) culture across the organisation • Nurture an organisational culture that complies to WSH internal and external standards and regulations • Ensure the organisation has appropriate WSH measures established to conduct work activities both lawfully and ethically	

CRITICAL WORK FUNCTIONS AND KEY TASKS	CRITICAL WORK FUNCTIONS	KEY TASKS	PERFORMANCE EXPECTATIONS (FOR LEGISLATED/ REGULATED OCCUPATIONS)
	Lead people	• Foster a culture of high performance and innovation amongst employees • Formulate the organisation's employee development systems for the advancement of high performing leaders and workforce in line with organisation's mission and emerging trends of the industry • Champion succession planning initiatives for key management positions • Approve strategies in attracting new employees based on business objectives and regulatory standards	In accordance with: - Workplace Safety and Health Act
	Grow business and stakeholder relationships	• Foster an atmosphere of inclusiveness with diverse external stakeholders and the global business community • Lead networking opportunities and relationship building with key strategic stakeholders • Explore values and expectations of key strategic stakeholders • Organise regular meetings with key stakeholders • Establish effective working relationships with union representatives to ensure synergy between tripartite parties • Endorse business expansion proposals and manpower forecasts • Assess new business growth opportunities to strengthen organisation's position in the marketplace	
	Strive for continuous improvement	• Set direction for organisational budget planning in consultation with stakeholders • Challenge new ideas while actively balancing risks and opportunities • Innovate and create an environment that encourages innovation • Maintain a culture of innovative thinking and practices • Guide market research activities to align research objectives with organisational needs and remain competitive	

Senior Vice President/Vice President/Assistant Vice President

TECHNICAL SKILLS AND COMPETENCIES			
Business Negotiation	Level 6	Financial Budgeting	Level 6
Change Management	Level 6	Innovation Management	Level 6
Cloud Computing Application	Level 5	Internet of Things Management	Level 5
Conflict Resolution	Level 6	Project Coordination	Level 5
Corporate Governance	Level 6	Staff Performance Management	Level 5
Data Synthesis	Level 6	Technology Infrastructure Management and Integration	Level 5

GENERIC SKILLS AND COMPETENCIES (TOP 5)			
Communication	Advanced	Leadership	Advanced
Decision Making	Advanced	Resource Management	Advanced
Global Mindset	Advanced		

Technical Skills and Competencies (TSCs)

TSC Category	TSC Title	TSC Description	Proficiency Levels					
			1	2	3	4	5	6
Audit Management	Workplace Safety and Health Audit Programme Management	Manage the WSH audit programme to ensure compliance to organisational audit procedures and legal requirements					●	●
	Workplace Safety and Health Audit System Management	Establish the policies and work procedures to ensure organisation's compliance to audit requirements					●	●
Big Data Analytics	Data Synthesis	Analyse data to monitor the processes for operations or process flow optimisation			●	●	●	●
Business Development	Business Negotiation	Engage stakeholders in accordance to established protocols to achieve business goals				●	●	●
	Business Presentation Delivery	Deliver effective and engaging presentations for a variety of audiences					●	●
	Workplace Safety and Health Business Case Development	Identify new ways to better meet the needs of existing Workplace Safety and Health (WSH) practices and ensure these work in an integrated fashion and bring benefits to the organisation				●	●	
General Management	Innovation Management	Manage organisation's ability to respond to internal and external opportunities by using creativity to introduce new ideas, processes and products			●	●	●	●
	Change Management	Manage organisational change management systems to drive organisational success and outcomes by preparing, equipping and supporting adoption of change			●	●	●	●
	Conflict Resolution	Adopt organisation's conflict mediation guidelines to find peaceful solutions to disagreements by evaluating and implementing resolution approaches and analysing mediation outcomes				●	●	●
	Corporate Governance	Establish organisational frameworks to ensure stakeholder interests are balanced and aligned with regulatory frameworks and organisational objectives				●	●	●
	Financial Budgeting	Prepare organisational budgets to support short and long term business plans through forecasting, allocation and financial policy settings					●	●
	Staff Performance Management	Maximise employee performance to meet business goals by aligning organisational objectives with internal processes, creating learning and development for staff and providing systems of feedback and support			●	●	●	
	Stakeholder Management	Manage organisation's key stakeholders, strategic partners and investors to maintain high levels of engagement by identifying needs, setting service standards and resolving issues in accordance with organisational procedures			●	●	●	

Technical Skills and Competencies (TSCs)

TSC Category	TSC Title	TSC Description	Proficiency Levels					
			1	2	3	4	5	6
Hazards Management	Asbestos Removal	Formulate an asbestos removal plan for the removal of asbestos from the workplace to minimise exposure and protect the health of all involved					●	
	Asbestos Risk Management	Formulate a management plan and implement control measures for the management of asbestos					●	
	Biological Hazards Management	Assess the necessary control measures including facility control, equipment control, safe practices and procedures and the use of personal protective equipment to help ensure biosafety at the workplace						●
	Confined Space Management	Assess safety when working in confined spaces under the relevant regulations		●	●			
	Ergonomic Hazards Management	Evaluate risks due to ergonomics at the workplace and measure the impact of ergonomics to employees					●	●
	Hazard Control in Laser Devices	Manage and control laser hazards from laser devices to ensure safety and to fulfil the licensing requirements for such devices					●	●
	Hazardous Substances Impact Evaluation	Manage relevant information for the evaluation of the health effects caused by hazardous substances commonly found at the workplace to initiate timely intervention actions						●
	Hazardous Substances Management	Manage processes and procedures for the sampling of hazardous substances and exposure at the workplace					●	●
	Hazards Identification	Implement a systematic approach for hazard identification and risk assessment to effectively eliminate or reduce risks	●	●	●	●	●	
	Indoor Air Quality Management	Manage indoor air quality (IAQ) through the identification and analysis of IAQ problems					●	●
	Local Exhaust Ventilation System Management	Apply a design and qualitative approach to assess the effectiveness, performance and compliance of the local exhaust ventilation system		●	●	●	●	
	Noise and Vibration Control	Manage noise and vibration control measures and assessment of control measures to prevent ill health effects at the workplace					●	
	Noise and Vibration Monitoring	Manage noise and vibration monitoring and assessment of monitoring to prevent ill health effects at the workplace					●	
	Radioactive Materials and Irradiating Apparatus Management	Manage radioactive materials and irradiating apparatus to ensure radiation safety at the workplace					●	●
	Skin Exposure Risk Management	Manage risks resulting from exposure to workplace hazards and identify the hazards that may cause injury to the skin					●	●
	Thermal Stressors Management	Manage human physiological response to thermal environment, approaches and methods of evaluating thermal risks and the control measures for the mitigation of the heat stress and their health effects					●	●

Technical Skills and Competencies (TSCs)

TSC Category	TSC Title	TSC Description	Proficiency Levels					
			1	2	3	4	5	6
Network Technology Management	Internet of Things Management	Interrelate computing devices, equipment and machines' data in a networked environment to provide specific solutions		●	●	●	●	
Operational Control Implementation	Behavioural Safety Management	Manage behavioural safety programmes in an organisation					●	●
	Emergency Response Management	Manage emergency response plans for the range of contingencies affecting the various industries		●	●	●	●	
	Human Factors in Job Design	Identify and mitigate risks of incidents and/or accidents caused by human factors				●	●	
	Risk Management	Apply appropriate methodologies to assess workplace safety and health risks within an organisation					●	●
	Workplace Health Management	Implement the necessary control measures to measure health hazards and ensure workplace health at the workplace					●	●
	Workplace Safety and Health Control Measures	Identify lapses in workplace safety and health within an organisation and put in place reasonabe practical control measures based on the Hierarchy of Control				●	●	
	Workplace Safety and Health Culture Management	Create and maintain a workplace safety and health culture based on a common set of attitudes, behaviours, and competencies		●	●	●	●	
	Workplace Safety and Health Incident Management	Apply a systematic and objective approach in workplace incident and accident investigations which include responding, reporting, gathering data and information, root cause analyses, implementation and review of corrective and preventive measures, to prevent recurrence of incidents and accidents	●	●	●	●	●	
	Workplace Safety and Health Performance Management	Establish and monitor indicators measuring effectiveness of workplace safety and health policies and work procedures in preventing incidents and safeguarding employees	●	●	●	●	●	
Project Management	Project Coordination	Coordinate project activities and workflows in collaboration with project teams and relevant stakeholders, as determined by project plans, to fulfil expected project outcomes and objectives			●	●	●	
Quality Management	Exposure and Risk Management	Measure and assess the risks due to hazardous substances at the workplace					●	
	Technical Writing	Apply technical writing approaches to communicate complex information and enable actions in pursuit of defined project goals				●	●	
Technology Management	Cloud Computing Application	Manage cloud computing technologies in order to offer a collaborative framework with centralised storage and contact points, fewer visibility barriers, and opportunities to enact simplified, standardised processes			●	●	●	
	Technology Application	Apply and integrate evaluated technologies into organisation operations or processes to achieve desired outcomes		●	●	●		
	Technology Infrastructure Management and Integration	Evaluate latest available technologies to integrate into existing operations so as to improve customer service, reduce costs and streamline supply chains			●	●	●	

Technical Skills and Competencies (TSCs)

TSC Category	TSC Title	TSC Description	Proficiency Levels					
			1	2	3	4	5	6
Workplace Safety and Health Management	Workplace Safety and Health Management in Chemical, Process, Pharmaceutical Industries and Laboratories	Manage the operational issues associated with the control and put in place appropriate risk control measures in the chemical, process, pharmaceutical industries and laboratories industry		●	●	●	●	
	Workplace Safety and Health Management in Construction Industry	Manage the operational issues associated with the control and put in place appropriate risk control measures in the construction industry		●	●	●	●	
	Workplace Safety and Health Management in Manufacturing Industry	Manage the operational issues associated with the control and put in place appropriate risk control measures in the manufacturing industry		●	●	●	●	
	Workplace Safety and Health Management in Marine Industry	Manage the operational issues associated with the control and put in place appropriate risk control measures in the marine industry		●	●	●	●	
	Workplace Safety and Health Management in Service Industry	Manage the operational issues associated with the control and put in place appropriate risk control measures in the service industry		●	●	●	●	
	Workplace Safety and Health Policy Development	Develop organisational workplace safety and health policies to ensure compliance with national regulations by applying knowledge of regulations and staying abreast of regulatory changes and practices	●	●	●	●	●	●
	Workplace Safety and Health Supervision in Tunnelling Construction	Apply appropriate control and safety measures when supervising deep excavation and tunnelling construction works common safety			●	●		
	Workplace Safety and Health System Management	Develop Workplace Safety and Health (WSH) frameworks and implement procedures and practices to ensure a safe and reliable workplace environment	●	●	●	●	●	●

Overview of Technical Skills and Competencies

Overview of Generic Skills and Competencies

General Descriptors for Technical Skills and Competencies (TSCs)

Level	Responsibility (Degree of supervision and accountability)	Autonomy (Degree of decision-making)	Complexity (Degree of difficulty of situations and tasks)	Knowledge and Abilities (Required to support work as described under Responsibility, Autonomy and Complexity)
6	Accountable for significant area of work, strategy or overall direction	Empowered to chart direction and practices within and outside of work (including professional field/ community), to achieve/ exceed work results	Complex	• Synthesise knowledge issues in a field of work and the interface between different fields, and create new forms of knowledge • Employ advanced skills, to solve critical problems and formulate new structures, and/or to redefine existing knowledge or professional practice • Demonstrate exemplary ability to innovate, and formulate ideas and structures
5	Accountable for achieving assigned objectives, decisions made by self and others	Provide leadership to achieve desired work results; Manage resources, set milestones and drive work	Complex	• Evaluate factual and advanced conceptual knowledge within a field of work, involving critical understanding of theories and principles • Select and apply an advanced range of cognitive and technical skills, demonstrating mastery and innovation, to devise solutions to solve complex and unpredictable problems in a specialised field of work • Manage and drive complex work activities
4	Work under broad direction Hold accountability for performance of self and others	Exercise judgment; Adapt and influence to achieve work performance	Less routine	• Evaluate and develop factual and conceptual knowledge within a field of work • Select and apply a range of cognitive and technical skills to solve non- routine/abstract problems • Manage work activities which may be unpredictable • Facilitate the implementation of innovation
3	Work under broad direction. May hold some accountability for performance of others, in addition to self	Use discretion in identifying and responding to issues, work with others and contribute to work performance	Less routine	• Apply relevant procedural and conceptual knowledge, and skills to perform differentiated work activities and manage changes • Able to collaborate with others to identify value-adding opportunities
2	Work with some supervision Accountable for a broader set of tasks assigned	Use limited discretion in resolving issues or enquiries. Work without frequently looking to others for guidance	Routine	• Understand and apply factual and procedural knowledge in a field of work • Apply basic cognitive and technical skills to carry out defined tasks and to solve routine problems using simple procedures and tools • Present ideas and improve work
1	Work under direct supervision Accountable for tasks assigned	Minimal discretion required. Expected to seek guidance	Routine	• Recall factual and procedural knowledge • Apply basic skills to carry out defined tasks • Identify opportunities for minor adjustments to work tasks

Generic Skills and Competencies (GSCs)

GSC	GSC Description	Proficiency Levels		
		Basic	Intermediate	Advanced
Communication	Convey and exchange thoughts, ideas and information effectively through various mediums and approaches.	Communicate information with others to respond to general inquiries and to obtain specific information.	Articulate and discuss ideas and persuade others to achieve common outcomes.	Negotiate with others to address issues and achieve mutual consensus.
Computational Thinking	Develop and use computational models, tools and techniques to interpret and understand data, solve problems and guide decision-making.	Use computational models, tools and techniques to identify patterns in a problem and develop a solution.	Modify existing computational models, tools and techniques to develop different solutions.	Develop and create computational models, tools and techniques to implement new solutions and apply to other problems.
Creative Thinking	Adopt a fresh perspective to combine ideas or information in new ways and make connections between seemingly unrelated fields to create new ideas and applications.	Connect ideas or information from related fields or applications to address an immediate issue.	Connect or combine ideas or information from unrelated fields or applications to generate multiple ideas to bring about a specific outcome.	Create original applications or ideas to reveal new possibilities and reshape goals through high level of innovativeness.
Decision Making	Choose a course of action from various alternatives using a reasoned process to achieve intended goals.	Make decisions of simple or routine nature to achieve intended goals using given information and guidelines.	Make decisions in a complex setting to achieve intended goals using a structured process and multiple sources of available information.	Make decisions in a volatile and ambiguous setting using a structured process and limited sources of available information to achieve intended goals.
Developing People	Help others to learn and develop their capabilities to enhance their performance and achieve personal or professional goals.	Use demonstration and explanation to teach a familiar task to inexperienced co-workers.	Provide coaching to others to develop their skills and knowledge on their jobs to enhance performance.	Provide mentorship to help others in their professional and personal development to improve performance and further their careers.
Digital Literacy	Use ICT tools, equipment and software to create, evaluate and share information digitally with others.	Perform basic functions using software programmes pertaining to computer operating systems and file management, and search online information.	Use available software features to create and edit documents, customise templates and reports and evaluate online information.	Use available software features to enhance documents, analyse and manipulate data, and use ICT to organise, share and communicate information clearly and coherently.
Global Mindset	Awareness of diversity across global cultures and markets. Seek opportunities to adopt successful practices and ideas.	Demonstrate understanding of global challenges and opportunities and how to transfer best practices across cultures. Respect cultural differences and needs of a diverse workforce.	Develop global networks and manage virtual relationships while balancing both local and global perspectives. Adopt a local and global perspective when making decisions.	Build the organisation's capabilities to compete in a global environment. Manage tension between corporate requirements, global and cultural differences.

Generic Skills and Competencies (GSCs)

GSC	GSC Description	Proficiency Levels		
		Basic	**Intermediate**	**Advanced**
Interpersonal Skills	Manage relationships efficiently and communicate with others effectively to achieve mutual consensus and outcomes.	Recognise own internal feelings and emotional states to manage interpersonal relationships in social situations.	Detect and decipher emotions of others to manage interpersonal relationships in social situations.	Influence, guide and handle others' emotions to build instrumental relationships and manage conflicts and disagreements.
Leadership	Lead others to achieve objectives in the most effective way. Provide an inclusive workplace that cultivates workplace relationships and teamwork, and foster the development of others.	Demonstrate professionalism to set a good example at peer level. Support others through own initiative and enthuse others through own positive and energetic approach.	Lead by example at team level. Encourage and guide others to adopt a point of view, make changes or take action. Provide a team environment that facilitates relationships building, teamwork and the development of others.	Lead by example at organisational level. Inspire, motivate and guide others to adopt a point of view, make changes or take action. Cultivate an open, cooperative and collaborative learning culture for the organisation.
Lifelong Learning	Seek out opportunities to enhance one's knowledge and skills. Access and acquire new knowledge and skills actively for continual learning.	Organise and manage own learning by setting learning targets. Identify learning approaches to achieve work or career goals.	Engage in collaborative learning by discussing one's learning with others and soliciting feedback to continually improve oneself.	Conduct self-reflective practices to review one's learning to facilitate continual growth in one's career or profession.
Managing Diversity	Work well with people from different ethnic, social, cultural and educational backgrounds and understand the concerns and interests of diverse work groups.	Demonstrate sensitivity to the cultural characteristics, values, beliefs, and behaviors of another ethnic or cultural group.	Build relationships with different ethnic or cultural groups by engaging in cross-cultural cooperative projects.	Manage conflicts arising from different ethnic or cultural groups and work effectively in cross-cultural settings.
Problem Solving	Generate feasible and efficient solutions to solve problems and capitalise on new opportunities.	Identify easily perceivable problems and follow given guidelines and procedures to solve the problems.	Identify less perceivable problems and use problem solving tools and techniques to solve the problems.	Anticipate potential problems beyond the current scope and apply higher order problem solving tools and techniques to turn problems into opportunities.
Resource Management	Efficient and effective deployment and allocation of resources when and where they are needed. Include planning, allocating and scheduling of resources to tasks, which typically include manpower, machines, money and materials.	Use resources to ensure optimum and efficient use of resources.	Deepen insights into the planning, allocation and deployment of resources to anticipate needs. Plan the allocation and deployment of resources efficiently and effectively.	Establish strategies for the allocation and deployment of resources efficiently and effectively.

GSC	GSC Description	Proficiency Levels		
		Basic	**Intermediate**	**Advanced**
Sense Making	Organise and analyse data and information accurately to identify relationships and detect patterns and trends to gain insights for decision-making.	Identify relationships and linkages within different components of data.	Interpret data to uncover patterns and trends between various sources of data.	Analyse data relationships, patterns and trends to gain important insights and make informed decisions.
Service Orientation	Commit to exceeding both internal and external customers' needs. Proactively identify customer needs and sustain a culture of service excellence within the organisation.	Exceed customer needs and expectations and handle service challenges with a positive mindset. Demonstrate an understanding of the organisation's service vision, mission and values.	Anticipate customer needs and expectations and elicit feedback from customers to improve service. Build relationships with customers to create and sustain customer loyalty.	Model, lead, train and motivate staff with a focus on sustaining a culture that encourages commitment to service excellence and high performance.
Teamwork	Work collaboratively and effectively with others to contribute to group efforts to achieve identified objectives.	Contribute to a positive and cooperative working environment by fulfilling own responsibilities and providing support to co-workers to achieve team goals.	Facilitate work team activities, provide assistance and support needed by team members and promote ownership and commitment among team members to work goals to improve team performance.	Establish teams, design and assess tasks to continually improve team effectiveness and cultivate a sense of organisational ownership and a cooperative working environment.
Transdisciplinary Thinking	Understanding of concepts across multiple disciplines, with the capacity to synthesise the knowledge and insights to guide decisions and foster cooperation.	Research and adapt concepts from outside one's field of expertise to supplement one's core knowledge and proficiency.	Co-relate material from diverse knowledge bases to guide decisions and policy making. Participate in reflective and trans-disciplinary communities within and outside the organisation.	Synthesise knowledge and insights across disciplinary boundaries to aid strategic decisions and foster cooperation within and outside of the organisation.
Virtual Collaboration	Use online collaborative communication tools to work as teams to accomplish tasks or projects.	Participate and contribute in a virtual team. Set up appropriate online collaborative tools and supporting equipment.	Use interactive collaborative tools to foster cohesion and commitment among virtual team members to achieve goals. Keep up-to-date with innovative online collaborative tools and applications to enhance one's proficiency in engaging in virtual collaboration.	Leverage on diverse team talent, latest online collaborative technologies and virtual platforms to produce collaborative behaviour and achieve technological savviness in virtual collaboration.

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Chevrons

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CYC International

Erect Group(s) Pte Ltd

ExxonMobil Asia Pacific Pte Ltd

Faesol Pte Ltd

Globaltronic Precision Pte Ltd

Go-Ahead Singapore

Grandpark City Hall

Hubble

IBM

Infineon Technologies Asia Pacific PL

JEP Precision Engineering Pte Ltd

Jetstar Asia Airways Pte Ltd

John Holland Pte Ltd

Keppel FELs Limited

Keppel Infrastructure Services Pte Ltd

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Sembwaste Pte Ltd

Singapore General Hospital

Singapore Power Ltd

Singapore Technologies Marine Ltd

SMRT Corporation Ltd

ST Healthcare Pte Ltd

ST Logistics Pte Ltd

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• Education and Training Providers for the inputs on skills and competencies development

• Organisations for their contributions in the development and validation of the Skills Framework for Workplace Safety and Health
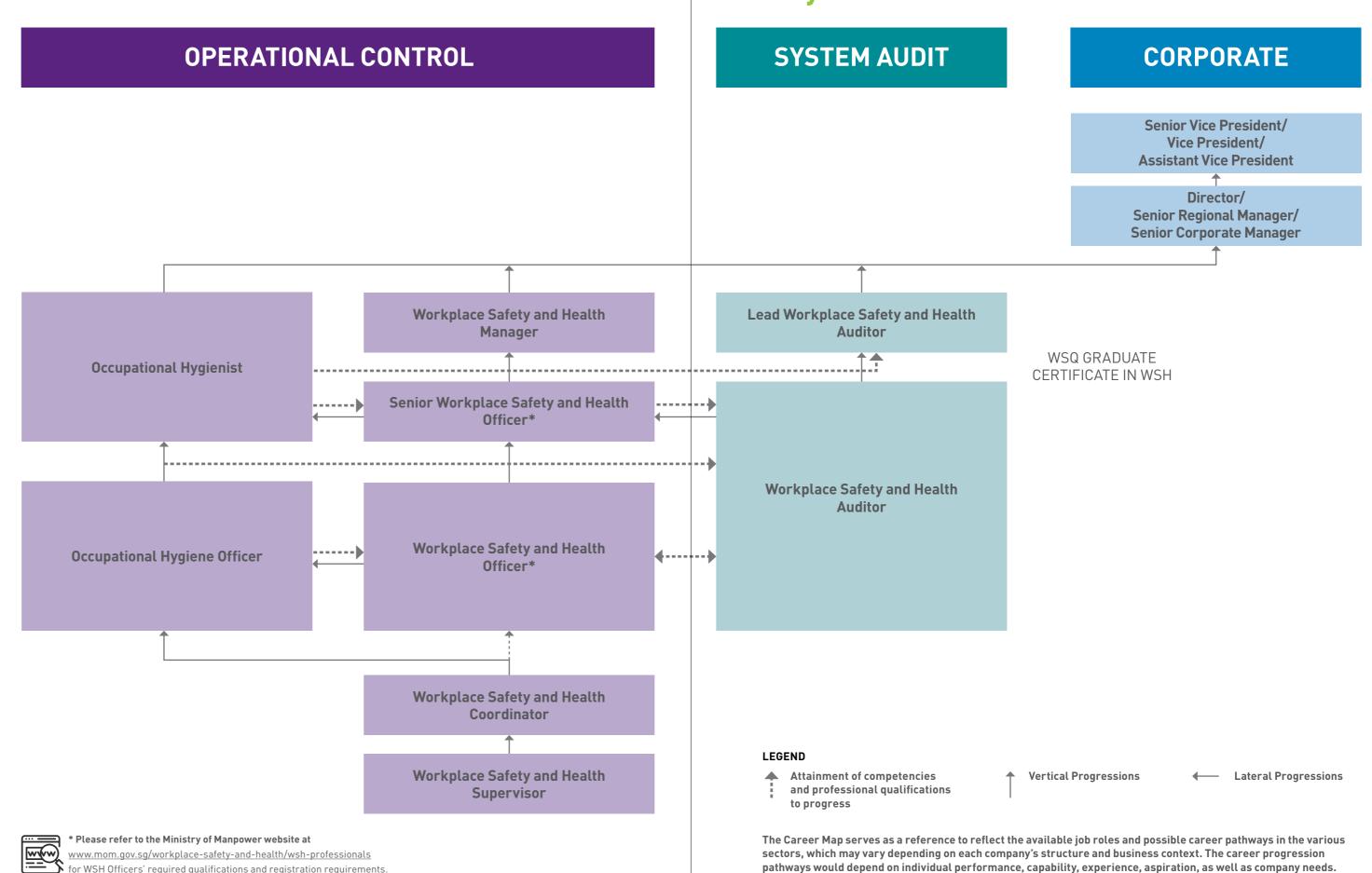
Notes

Wage Information

Job Roles	Monthly Gross Wage	
	25th Percentile ($)	75th Percentile ($)
Operational Control		
Workplace Safety and Health Supervisor	2,006	3,013
Workplace Safety and Health Coordinator	3,200	4,177
Workplace Safety and Health Officer	4,303	5,842
Senior Workplace Safety and Health Officer	6,007	8,892
Workplace Safety and Health Manager	8,561	13,404
Occupational Hygiene Officer	4,063	5,837
Occupational Hygienist	6,612	9,170
System Audit		
Lead Workplace Safety and Health Auditor/ Workplace Safety and Health Auditor	9,542	12,328
Corporate		
Director/Senior Regional Manager/Senior Corporate Manager	12,420	16,491
Senior Vice President/Vice President/Assistant Vice President	17,475	27,918

Wage Survey conducted by Mercer (Singapore) Pte Ltd, commissioned by SkillsFuture Singapore Agency

Notes:
1) Monthly Gross Wage refers to the sum of the basic wage, overtime payments, commissions, allowances, and other regular cash payments. It is before deduction of employee CPF contributions and personal income tax, and excludes employer CPF contributions, bonuses, stock options, other lump sum payments and payments-in-kind.
2) 25th Percentile Wage refers to the wage level which divides the bottom 25% of wage earners from the rest.
3) 75th Percentile Wage refers to the wage level which divides the top 25% of wage earners from the rest.

SKILLS FRAMEWORK FOR WORKPLACE SAFETY AND HEALTH
Career Pathways

OPERATIONAL CONTROL | **SYSTEM AUDIT** | **CORPORATE**

Senior Vice President/
Vice President/
Assistant Vice President

Director/
Senior Regional Manager/
Senior Corporate Manager

Workplace Safety and Health Manager

Lead Workplace Safety and Health Auditor

WSQ GRADUATE CERTIFICATE IN WSH

Occupational Hygienist

Senior Workplace Safety and Health Officer*

Occupational Hygiene Officer

Workplace Safety and Health Officer*

Workplace Safety and Health Auditor

Workplace Safety and Health Coordinator

Workplace Safety and Health Supervisor

LEGEND

⁝ Attainment of competencies and professional qualifications to progress

↑ Vertical Progressions

← Lateral Progressions

* Please refer to the Ministry of Manpower website at
www.mom.gov.sg/workplace-safety-and-health/wsh-professionals
for WSH Officers' required qualifications and registration requirements.

The Career Map serves as a reference to reflect the available job roles and possible career pathways in the various sectors, which may vary depending on each company's structure and business context. The career progression pathways would depend on individual performance, capability, experience, aspiration, as well as company needs.

SKILLS FRAMEWORK FOR WORKPLACE SAFETY AND HEALTH
Career Pathways

Scan this QR code to find out more about the Skills Framework for Workplace Safety and Health

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Workplace Safety and Health