

**SKILLS FRAMEWORK FOR ENERGY AND CHEMICALS
SKILLS MAP - SUPERINTENDENT**

Sector	Energy and Chemicals			
Track	Production and Process Engineering			
Occupation	Functional Leader			
Job Role	Superintendent			
Job Role Description	The Superintendent oversees process operations at plant sites, manages shift teams and facilitates the utilisation of resources to meet production and quality targets. He/She drives the development and implementation of Standard Operating Procedures (SOPs) by reviewing existing production or work processes to optimise the workflow for the entire production chain.			
	The Superintendent drives compliance with Workplace Safety and Health (WSH) and Environmental Management System (EMS) regulatory and system requirements, by ensuring risk assessments for production-related activities are conducted, control measures are implemented, and by leading WSH and EMS incident investigations. He leads the Emergency Response Team (ERT) as the Site Incident Controller (SIC) during emergencies. In addition, he coaches and mentors the Production Supervisors under his charge and validates production-related continuous improvement initiatives and activities.			
	The Superintendent manages shift teams on a rotating shift basis in the field and/or control room, and may be on standby round-the-clock for production-related matters. He possesses good leadership, people management, resource management, communication and problem-solving skills.			
Critical Work Functions and Key Tasks	Critical Work Functions		Key Tasks	
	Administer Workplace Safety and Health (WSH) and Environmental Management Systems (EMS)			Drive compliance with WSH and EMS regulatory and system requirements
				Ensure risk assessments for production-related activities are conducted and control measures are implemented
				Lead WSH and EMS incident investigations
				Manage contractors to ensure compliance with the organisation's WSH and EMS standards and practices
				Review Safe System of Work (SSoW) processes and drive enforcement
	Administer Process Safety Management (PSM) systems			Support routine site PSM compliance reviews
				Support the implementation of the PSM framework relating to production
	Manage emergency responses and crises			Facilitate responses to crisis situations and recovery activities, in accordance with organisational crisis management frameworks and procedures
				Lead emergency responses as the Site Incident Controller (SIC)
	Perform process units and utilities operations			Drive production teams to ensure deliverables are met during maintenance and turnaround activities
				Drive the development, implementation and compliance of Standard Operating Procedures (SOPs) for process operations
				Manage plant operations and performance, in accordance with production aims and objectives
				Manage the implementation of emerging technologies for process operational tasks across production teams
				Provide guidance to production teams in complex operational abnormalities
Administer staff and organisational development			Assist in the implementation of business continuity plans	
			Coach and mentor staff	
			Manage resources across production teams	
			Manage team performance to achieve organisational goals	
			Validate continuous improvement initiatives and activities	
Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Business Continuity Management	Level 4	Leadership	Advanced
	Change Management	Level 4	Decision Making	Advanced
	Continuous Improvement Management	Level 4	Problem Solving	Advanced
	Control Room Operations Management	Level 4	Sense Making	Advanced
	Crisis Management	Level 4	Resource Management	Advanced
	Data and Statistical Analytics	Level 3		
	Emergency Response Management	Level 4		
	Engineering Drawing Interpretation and Management	Level 4		
	Engineering Management of Change	Level 4		
	Engineering Project Management	Level 3		
	Environmental Management System Framework Development and Implementation	Level 4		
	Feedstock and Product Transfer Operations Management	Level 5		

Skills & Competencies	Incident Investigation Management	Level 3
	Internet of Things Management	Level 3
	Operations Reporting Protocol Application	Level 5
	Organisational Resource Management	Level 4
	Plant Turnaround Management	Level 4
	Process Control	Level 3
	Process Equipment Preparation for Mechanical Work	Level 4
	Process Operations Troubleshooting	Level 5
	Process Plant and Equipment Integrity Management	Level 3
	Process Safety Management Framework Development and Implementation	Level 3
	Process Unit and Utilities Operations Management	Level 5
	Procurement Management	Level 4
	Production Planning and Scheduling	Level 3
	Robotic and Automation Technology Application	Level 4
	Safe System of Work Development and Implementation	Level 5
	Staff Development Management	Level 4
	Staff Management	Level 4
	Standard Operating Procedure Development and Implementation	Level 5
	Technical Report Writing	Level 4
	Third Party Management	Level 4
Training, Coaching and Assessment Management	Level 4	
Workplace Safety and Health Framework Development and Implementation	Level 4	
Workplace Safety and Health Hazard Identification and Risk Control Management	Level 4	
Yield Analysis	Level 3	
Programme Listing	For a list of Training Programmes available for the Energy and Chemicals sector, please visit: www.skillsfuture.sg/skills-framework/energyandchemicals	

The information contained in this document serves as a guide.