

**SKILLS FRAMEWORK FOR SEA TRANSPORT  
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

<b>TSC Category</b>	Workplace Safety and Health					
<b>TSC</b>	Maritime Incident Management					
<b>TSC Description</b>	Apply a systematic and objective approach in health, safety, security, environment and quality (HSSEQ) 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					
<b>TSC Proficiency Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
			<b>STP-WSH-3093-1.1</b>	<b>STP-WSH-4093-1.1</b>	<b>STP-WSH-5093-1.1</b>	
			Conduct root cause analysis of health, safety, security, environment and quality (HSSEQ) incidents and contribute suggestions to prevent future recurrences	Lead health, safety, security, environment and quality (HSSEQ) investigations and implement workplace and environmental incident investigation workflows and procedures to ensure a systematic and objective approach in incident investigations	Establish and manage health, safety, security, environment and quality (HSSEQ) incident investigation and analysis processes	
<b>Knowledge</b>			<ul style="list-style-type: none"> <li>Types of incidents, accidents, near misses and safety training observation program (STOP) cards for investigations</li> <li>Isolation of immediate hazards</li> <li>Forms of immediate medical assistance</li> <li>Protocol and requirements of incident notification</li> <li>Interview techniques</li> <li>Techniques for verifying information with interviewees</li> <li>Causes of incidents including personal health issues and corresponding corrective and preventive actions</li> <li>Tools for root cause analysis</li> </ul>	<ul style="list-style-type: none"> <li>HSSEQ legal requirements related to maritime incident investigations</li> <li>HSSEQ incident reporting requirements</li> <li>Incident investigation workflows, processes, procedures and documentation</li> <li>Roles and responsibilities of HSSEQ incident investigation teams</li> <li>Methods of gathering information and evidences</li> <li>Types of evidence to gather during investigations</li> <li>Incident interview techniques</li> <li>Information analysis and review methodologies</li> </ul>	<ul style="list-style-type: none"> <li>HSSEQ legal requirements related to maritime incident investigations, analyses and reporting</li> <li>Appropriate actions for compliance with legal other requirements for incident investigations</li> <li>Types of incidents for investigation</li> <li>Types of resources required in developing HSSEQ incident investigation and analysis processes</li> <li>Relevant stakeholders required for consultation in developing HSSEQ investigation and analysis process</li> <li>Composition and competency of HSSEQ investigation teams</li> </ul>	

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			<ul style="list-style-type: none"> <li>• Methods of applying cause and effect and root cause analysis (RCA) techniques</li> <li>• Flag state inspection, International Safety Management (ISM), International Ship and Port Facility Security (ISPS) and Maritime Labour Convention (MLC) standards</li> </ul>	<ul style="list-style-type: none"> <li>• Methods of developing a detailed investigation report, which includes objectives, sequence of events trail, evidence trail, summary and conclusion</li> </ul>	<ul style="list-style-type: none"> <li>• Measures in setting up site securities to ensure integrity of evidence</li> <li>• Types of HSSEQ incident analysis tools</li> <li>• HSSEQ incident corrective and preventive actions</li> <li>• Data to be included in HSSEQ incident investigation and analysis reports</li> <li>• Strategies to address and minimise HSSEQ hazards and risk</li> </ul>	
<b>Abilities</b>			<ul style="list-style-type: none"> <li>• Report incidents' occurrences in accordance with port state control and flag state control legal requirements</li> <li>• Conduct root cause analysis utilising information from HSSEQ incidents</li> <li>• Identify causes of incidents including personal health issues</li> <li>• Contribute suggestions for corrective and preventive measures to address possible root causes</li> <li>• Advise on root causes of incidents including personal health issues based on the information provided</li> <li>• Generate incident reports to relevant authorities</li> <li>• Monitor and report</li> </ul>	<ul style="list-style-type: none"> <li>• Develop incident investigation, analysis and reporting processes</li> <li>• Conduct investigations with HSSEQ incident investigation team</li> <li>• Manage investigation and analysis processes</li> <li>• Advise formation of incident investigation teams</li> <li>• Lead incident investigations and prioritise investigation actions</li> <li>• Select and use appropriate investigation tools</li> <li>• Prepare investigation reports detailing findings, analyses, underlying root causes and make recommendations to prevent recurrences</li> <li>• Ensure corrective and preventive actions are implemented</li> </ul>	<ul style="list-style-type: none"> <li>• Develop incident investigation, analysis and reporting processes</li> <li>• Manage investigation and analysis processes</li> <li>• Analyse the root causes including personal health issues and recommend appropriate corrective and preventive actions to prevent HSSEQ incident recurrence</li> <li>• Evaluate effectiveness of HSSEQ incident investigation and analysis processes Recommend improvements to HSSEQ incident investigation and analysis processes, based on identified gaps</li> <li>• Formulate strategies to address and minimise HSSEQ hazards and risks</li> <li>• Lead negotiations with</li> </ul>	

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			progress of corrective and preventive actions	<ul style="list-style-type: none"> <li>• Communicate effectively and notify respective personnel</li> <li>• Liaise with external stakeholders on new HSSEQ initiatives to mitigate occurrences of incidents</li> </ul>	stakeholders to ensure all aspects of health and safety meet statutory compliance	
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