<table>
<thead>
<tr>
<th>TSC Category</th>
<th>Health, Safety and Environment</th>
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<tbody>
<tr>
<td>TSC</td>
<td>Hazard and Risk Identification and Management</td>
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<tr>
<td>TSC Description</td>
<td>Implement a systematic approach for hazard identification and risk assessment to manage hazards that may occur within biopharmaceutical manufacturing facilities</td>
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<tr>
<td>TSC Proficiency Description</td>
<td>Level 1</td>
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<td>BPM-HSE-2004-1.1</td>
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<tr>
<td>Knowledge</td>
<td>Follow relevant Health, Safety and Environment (HSE) legislations and relevant industry codes of practice to aid in hazard identification and control at the workplace</td>
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<td>Conduct risk identification and recommend control measures to mitigate risk exposure</td>
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<td>Develop robust hazard and risk management plans, oversee risk control measures and evaluate their effectiveness</td>
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<tr>
<td>Abilities</td>
<td>Identify hazards by conducting HSE checks on work areas, safety signs, safety devices and equipment</td>
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<td>Identify risks in the workplace</td>
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<td>Develop plans for addressing risks in the workplace</td>
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<td>Communicate risks and control measures to stakeholders according</td>
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- **Knowledge**
  - HSE, legal and other requirements relevant to safe work practices in the biopharmaceutical manufacturing industry
  - Common mechanical, electrical, fire, chemical and biological HSE hazards and their associated risks
  - Preventive and control measures against HSE hazards
  - Types and uses of Personal Protective Equipment (PPE) and safety devices
  - Types of atmospheric monitoring equipment
  - Types and interpretation of safety signs
  - Procedures for reporting HSE hazards
  - Procedures for disposing waste
  - Principles of and methodologies for risk assessment
  - Health, Safety and Environment (HSE) checklists for designated work areas
  - Methods of conducting job safety analysis to identify HSE risks
  - Means of implementing risk control measures
  - Management of HSE documentation
  - Health, Safety and Environment (HSE) management programmes
  - Elements of HSE management systems
  - Means of obtaining updates on amended or new HSE legal requirements
  - Workplace communication channels
  - Causes and types of lapses in HSE control measures
  - Methods for evaluating risk control measures
| • Report any abnormalities and problems encountered in complying with HSE requirements  
• Follow measures to prevent and control hazards when working in confined spaces or a potentially dangerous environment  
• Use gas detection instruments and other monitoring equipment when working in a potentially dangerous environment  
• Follow organisational procedures to collect and store hazardous waste for disposal  
• Collect data on the outcomes of hazard and risk management measures  | • Conduct job safety analysis and identify safety and health hazards associated with the jobs or tasks  
• Analyse the level of risks involved for identified hazards  
• Complete risk assessment forms  
• Implement risk control measures according to organisational procedures  
• Propose ideas to improve the control of HSE risks in accordance with the hierarchy of control  
• Maintain HSE-related documentation for specific operational processes  | • to organisational procedures  
• Implement hazard identification guidelines within the organisation  
• Implement risk assessment frameworks for evaluating safety risks on the job  
• Evaluate the effectiveness of the organisation’s hazard management and risk control measures or procedures  
• Report outcomes of risk control measures to relevant stakeholders  
• Provide consolidated insights and recommendations for the formulation of HSE risk management practices  
• Implement HSE-related documentation procedures across operational processes  |