

TSC Category	Laboratory Management					
TSC	Sample Management					
TSC Description	Manage samples in solid, liquid and gas phases, from preparation, sampling, labelling, transportation, storage to disposal in compliance with regulatory and organisational requirements					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	ECM-LAB-1004-1.1	ECM-LAB-2004-1.1	ECM-LAB-3004-1.1	ECM-LAB-4004-1.1	ECM-LAB-5004-1.1	ECM-LAB-6004-1.1
	Follow in-process sampling methods and procedures to assist in routine in-process and product sampling in a safe and reliable manner	Apply correct methods and procedures for handling of samples, including preparation, sampling, labelling, transportation, storage and disposal, to perform routine in-process and product sampling in safe and reliable manner	Maintain safe and reliable sample management systems and procedures in accordance with organisational requirements	Facilitate the development and implementation of sample management systems and supervise sample management activities in compliance with organisational and regulatory requirements	Manage safe and reliable sample management systems in accordance with regulatory requirements, industry and international best practices, and emerging technologies	Lead direction and adoption of new and emerging technologies in sample management to meet the organisation's quality, health, safety and environment objectives
Knowledge	<ul style="list-style-type: none"> Key concepts in sampling such as sample contamination, traceability, integrity and chain of custody International System of units (SI) Purpose of sample collection and sampling plans Operating principles of sampling equipment, tools and materials Selection and proper use of Personal Protective Equipment (PPE) Hazard identification, risk assessment and risk control measures 	<ul style="list-style-type: none"> Standard Operating Procedures (SOPs) for receiving samples, correct identification and storage Potential hazardous and unstable nature of samples Safety Data Sheets (SDS) Basic sampling techniques Chemical handling procedures and techniques Selection and proper use of Personal Protective Equipment (PPE) Data entry into the laboratory information management system (LIMS) Principles of hazardous waste control and disposal 	<ul style="list-style-type: none"> Principles and methods of sample identification and recording Sample colour codes, symbols and categorisation Chemical handling procedures and techniques Sample storage procedures Sample disposal procedures Safety Data Sheets (SDS) Hazardous waste identification, segregation, storage and disposal procedures Data entry into the laboratory information management system (LIMS) Selection and proper use of Personal Protective Equipment (PPE) 	<ul style="list-style-type: none"> Methods of maintaining a register of chemicals and Safety Data Sheets (SDS) Methods of labelling and warning signs Safe storage and transportation of chemicals methods Chemical waste disposal methods Risk assessment techniques Relevant Workplace Safety and Health (WSH) and environmental acts and regulations for the management of hazardous substances and samples Codes of Practice and industry best practices on sampling management 	<ul style="list-style-type: none"> Industry practices and standards such as ISO/IEC 17025 laboratory quality management Laboratory management information systems applications and technology advancements Laboratory sample tracking systems and methods Relevant Workplace Safety and Health (WSH) and environmental acts and regulations for the management of hazardous substances and samples Codes of Practice and industry best practices on sampling management 	<ul style="list-style-type: none"> Laboratory sample management strategies ISO/IEC 17025 Quality Management System (QMS) Types and applications of laboratory information management systems (LIMSs) National and international regulatory requirements for sample and hazardous substances management Codes of Practice and industry best practices on sampling management New and emerging technologies in sampling management, including sampling techniques, sampling tools and methodologies Mentoring techniques

					<ul style="list-style-type: none"> • Inspection and audit techniques • Emerging technologies in sampling management, including sampling techniques, sampling tools and methodologies 	
Abilities	<ul style="list-style-type: none"> • Assist in the collection of a variety of samples in solid, liquid and gas phases at a range of sites and sampling points as per sampling plan • Use a range of sampling collection and transportation equipment, tools and materials • Select and use PPE correctly • Collect samples safely with minimal environmental impact • Liaise with other department staff to access sites and conduct sampling efficiently 	<ul style="list-style-type: none"> • Conduct routine sampling as per procedures • Identify and apply a range of sampling techniques and methods • Record sampling data into the LIMS • Conduct sample receipt and storage in accordance to SOPs • Identify and select the correct labelling for identification control • Apply the correct chemical handling requirements on receipt of the sample • Assist in monitoring sample storage conditions • Select and use PPE correctly • Apply SDS information for sample handling • Perform sample data recording in accordance to LIMS procedures • Carry out waste segregation and disposal in accordance to organisational procedures 	<ul style="list-style-type: none"> • Interpret sample management systems and procedures • Coordinate and apply sampling methods and techniques according to Standard Operating Procedures (SOPs) • Coordinate sample preparation, sampling, labelling, transportation, storage and disposal • Prepare samples for analysis • Input sample testing result data into the LIMS • Store samples correctly following policies and procedures • Coordinate and monitor sample storage conditions • Dispose of chemical samples following correct procedures • Interpret SDS information for sample handling • Ensure the correct selection and use of PPE within team members 	<ul style="list-style-type: none"> • Facilitate the implementation of sample management systems and procedures • Facilitate the development of sample management systems and procedures • Supervise the correct sample management procedures • Supervise correct handling, storage and disposal of hazardous substances • Assist in the review of sampling, sample handling, preparation, and identification • Assist in the review of sample labelling, colour coding and storage 	<ul style="list-style-type: none"> • Review sample management systems and procedures • Assess the compliance to the relevant WSH and environmental acts and regulations for the management of hazardous substances and samples • Manage laboratory management information system data input, review and reporting • Recommend laboratory sample tracking systems • Manage inspections and audits of sample management to ensure compliance • Recommend improvements to sample management systems and procedures by making reference to regulatory requirements, industry and international best practices and emerging technologies 	<ul style="list-style-type: none"> • Endorse sample management systems and procedures • Mentor the selection and adoption of new and emerging technologies for sample management • Mentor the selection and implementation of LIMS