



**NATIONAL OCCUPATIONAL  
STANDARD FOR QUALITY  
CONTROLLER**

## APPROVING AUTHORITY

This National Occupational Standard has been prepared and published under the authority of the Zambia Qualifications Authority Board on 25<sup>th</sup> February 2021.

## ZAMBIA QUALIFICATIONS AUTHORITY

The Zambia Qualifications Authority Act No. 13 of 2011 was enacted by the Government of the Republic of Zambia to ***“provide for the development and implementation of a national qualifications framework; establish the Zambia Qualifications Authority; provide measures to ensure that standards and registered qualifications are internationally comparable; and provide for matters connected with, or incidental to the foregoing”***. Among other functions, ZAQA is responsible for ***determining national standards for any occupation***, through various sector specific National Occupational Standards Development Teams (NOSDTs).

## REVISION OF NATIONAL OCCUPATIONAL STANDARDS

National Occupational Standards shall be revised every after **5 years**, or whenever necessary, by the issue of either amendments or of revised editions. It is important that users of National Occupational Standards (NOS) should ascertain that they are in possession of the latest amendments or editions.

## NOS DEVELOPMENT TEAM RESPONSIBLE

This National Occupational Standard was prepared by the Manufacturing National Occupational Standards Development Team, upon which the following organisations were represented:

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2. Copperbelt University
3. Evelyn Hone College
4. Lafarge Cement (Z) Plc
5. Lusaka Business and Technical College
6. Trade Kings Group
7. University of Zambia
8. Zambia Association of Manufacturers
9. Zambian Breweries Plc
10. Zambia Bureau of Standards
11. Zambia Qualifications Authority – Secretariat.

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## FOREWORD

The Zambia Qualifications Authority (ZAQA) is a statutory body under the Ministry of Higher Education established by ZAQA Act No. 13 of 2011 to “**provide for the development and implementation of a national qualifications framework; provide measures to ensure that standards and registered qualifications are internationally comparable; and provide for matters connected with, or incidental to the foregoing**”.

Among other functions, ZAQA is responsible for “**determining national standards for any occupation**”, through various sector specific National Occupational Standards Development Teams (NOSDTs) of experts composed of representation from appropriate authorities, government departments, industry, academia, regulators, consumer associations and non-governmental organisations, etc.

This National Occupational Standard (NOS) has been developed by the Manufacturing National Occupational Standards Development Team in accordance with the procedures and guidelines of ZAQA. All users should ensure that they have the latest edition of this publication as National Occupational Standards are revised from time to time.

This NOS shall be used by, among others, industry, employers, quality assurance bodies, awarding and professional bodies and education and training institutions, as a benchmark to identify training needs, develop job profiles/descriptions, develop curricula and learning programmes, in various sectors where the occupation exists. In the Manufacturing sector, demonstration of competence against this NOS may be required in order to run a business or practice a craft or profession.

## JUSTIFICATION

The role of the Quality Controller is critical in the manufacturing sector to ensure that the products comply with specifications and are fit for their intended purpose. Consequences of not having a Quality Controller include product failing to meet customer and regulatory requirements. Without a Quality Controller, the Manufacturing sector may lose substantial amount of financial resources through reworks, recalls and approved disposals of deviating products.

This National Occupational Standard highlights core knowledge, skills, competences and personal attributes that Quality Controllers must possess to be successful in their jobs.

## **ACRONYMS AND ABBREVIATIONS**

CS	Core Skill
EIZ	Engineering Institution of Zambia
HPCZ	Health Professions Council of Zambia
NOS	National Occupational Standard
NOSDT	National Occupational Standards Development Team
OK	Organisational Knowledge
PC	Performance Criteria
PS	Professional Skill
QC	Quality Controller
RK	Regulatory Knowledge
RPL	Recognition of Prior Learning
TK	Technical Knowledge
ZAQA	Zambia Qualifications Authority
ZQF	Zambia Qualifications Framework

## GLOSSARY OF TERMS

For the purposes of this NOS, the following terms and definitions shall apply:

**Core Skills/Generic Skills:** are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the NOS, these include communication related skills that are applicable to most job roles.

**Function:** is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of NOS.

**Job Title:** defines a unique set of functions that together form a unique employment opportunity in an organisation.

**Knowledge and Understanding:** are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

**National Occupational Standards (NOS):** are statements of the standards of performance individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding. They are precise descriptions of what an individual is expected to be able to do in his/her work role.

**National Occupational Standards (NOS) Code:** is a unique reference code that identifies a NOS.

**National Occupational Standards Development Team (NOSDT):** means an established group of national stakeholders/experts responsible for the development of National Occupational Standards within a specific economic sector or occupation.

**Occupation:** is a set of job roles, which perform similar/related set of functions in an industry.

**Organisational Context:** includes the way the organisation is structured and how it operates, including the extent of operative knowledge that managers have in their relevant areas of responsibility.

**Performance Criteria:** are statements that together specify the standard of performance required when carrying out a task.

**Scope:** is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required.

**Sector:** is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.

**Sub Sector:** is derived from a further breakdown based on the characteristics and interests of its components.

**Technical Knowledge:** is the specific knowledge needed to accomplish specific designated responsibilities.

**Unit Title:** gives a clear overall statement about what the incumbent should be able to do.



## 1. OVERVIEW

This is an introductory section providing a brief summary and specific information or commentary about the content of the NOS and the targeted sector and occupation to help the user judge whether it is relevant to them.

<b>NOS Code</b>	NOS.QC.01
<b>Occupation</b>	Quality Management/Control
<b>Job Title</b>	Quality Controller
<b>Job Description</b>	Quality Controller in a manufacturing sector ensures: <ul style="list-style-type: none"> <li>• That production outputs meet desired quality specifications.</li> <li>• The Assessment of all raw materials and inputs to meet product specifications.</li> <li>• Implementation of latest Quality Management Systems, as applicable.</li> </ul>
<b>Job Purpose</b>	Quality Controller ensures that there is consistency in meeting specified quality outputs from the production processes.
<b>ZQF Level</b>	6
<b>Sector</b>	Manufacturing
<b>Sub sector</b>	All subsectors of the Manufacturing sector
<b>Other Economic Sector(s) in which the Occupation is Practiced</b>	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Mining</li> <li>• Health</li> <li>• Tourism and hospitality, etc.</li> </ul>
<b>Other Similar Jobs that can be performed by the Quality Controller</b>	<ul style="list-style-type: none"> <li>• Quality Manager</li> <li>• Quality Specialist</li> <li>• Quality Inspector</li> </ul>
<b>Minimum Educational Job Entry Qualification(s)</b>	Diploma in Science Laboratory Technology, or equivalent.
<b>Practicing License Requirements (if any)</b>	<ul style="list-style-type: none"> <li>• HPCZ license, as applicable.</li> <li>• Membership with the Engineering Institution of Zambia (EIZ) and Practicing Licence from the Engineering Registration Board (EngRB), as applicable.</li> </ul>
<b>Training/RPL</b>	<ul style="list-style-type: none"> <li>• Use of ICTs (Internet, Computer packages, Email, Computer Software and Hardware necessary for the job, etc.)</li> <li>• Quality Enhancement Methods</li> </ul>
<b>Minimum Job Entry Age</b>	21
<b>Prior Experience (Suggested)</b>	At least 2 years of relevant experience
<b>Performance Criteria</b>	As described in the Units under Section 4

## **2. SCOPE**

This National Occupational Standard specifies the fundamental knowledge and understanding, skills and competences that the Quality Controllers must possess to be successful in their jobs.

## **3. PERSONAL ATTRIBUTES (VALUES, ETHICS AND ATTITUDES)**

This job requires an individual to possess:

- Honesty, integrity and capacity to diplomatically deal with different situations
- Ability to utilise computer programmes extensively.
- Analytical ability.
- Communication skills and interpersonal skills.
- Mental alertness, endurance and judgement.
- Problem solving skills.
- Precision and accuracy.
- Attention to detail.
- Good numeracy capabilities.
- Good understanding of the principles of good manufacturing practices.
- Ability to maintain confidentiality
- Willingness to learn new things

## **4. UNITS AND ELEMENTS**

This National Occupational Standard is divided into three (3) units representing the tasks that a jobholder should undertake in his/her day to day work. Each unit is further broken down into elements depicting the number of activities to be carried out for the successful execution of a particular task.

**UNIT 1** [This unit is about carrying out process quality control]

<b>Unit No.</b>	<b>01</b>
<b>Unit Title</b>	<b>Carry out Process Quality Control</b>
<b>Description</b>	This unit is about demonstrating competence to carry out process quality control
<b>Scope</b>	This unit covers the following: <ul style="list-style-type: none"> <li>• Process control through laboratory analysis</li> <li>• Laboratory equipment</li> <li>• Quality assurance</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria (PC)</b>
<b>Process control</b>	To be competent, the individual must be able to: PC1. Carry out sampling out as per documented methods PC2. Identify, verify and handle samples so as retain sample identity and integrity as per documented procedure. PC3. Carry out sample preparation and dispatch, if necessary, as per documented method. PC4. Prepare appropriate apparatus, equipment and reagents as per documented procedure. PC5. Perform analysis of samples using fundamental laboratory techniques and practices while ensuring adherence to statistical quality control procedures. PC6. Generate accurate results at specified times. PC7. Record and report results as per standard procedure. PC8. Accurately identify process/products deviations and promptly report them for onward action. PC9. Adhere to appropriate deviation management procedure.
<b>Laboratory equipment</b>	To be competent, the individual must be able to: PC10. Perform equipment maintenance and calibration according to documented procedures. PC11. Adhere to preventative maintenance schedules and equipment calibration frequencies. PC12. Retain and update records of preventive maintenance and calibration of equipment in the working area. PC13. Adhere to plans in place to avoid accidental use of decommissioned equipment.
<b>Quality assurance</b>	To be competent, the individual must be able to: PC14. Conduct required and requested quality audits, completing the appropriate documentation and communicating the audit results. PC15. Conduct a gap analysis to identify problems or training needs and communicating these to Management. PC16. Regularly and timely communicate the quality performance to all key stakeholders, both internal and external as appropriate. PC17. Where required, initiate corrective actions coming out of the quality audits in areas that impact the laboratory.

	<p>PC18. Carry out statistical quality control analyses in support of the evaluation of continuous improvement opportunities through trending or charting of specific quality outputs.</p> <p>PC19. Implement applicable laboratory proficiency testing schemes or inter-laboratory testing programmes.</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organisational Context (Knowledge of the company/ organisation and its processes)</b>	<p>The individual on the job must demonstrate knowledge and understanding of:</p> <ul style="list-style-type: none"> <li>OK1. Process knowledge of the entire manufacturing plant</li> <li>OK2. Product specifications</li> <li>OK3. Applicable regulations and industry standards</li> <li>OK4. Company policies and standard operations procedures</li> <li>OK5. Relevant management systems such as food safety, laboratory management systems, etc.</li> <li>OK6. Company vision, mission, and values</li> <li>OK7. Customer specific requirements mandated as part of the work</li> </ul>
<b>B. Technical Knowledge</b>	<p>The individual on the job must demonstrate knowledge and understanding of:</p> <ul style="list-style-type: none"> <li>TK1. Chemical preparation and handling. Basic chemistry</li> <li>TK2. Good laboratory practises</li> <li>TK3. Basic instrumentation and troubleshooting</li> <li>TK4. Appropriate laboratory techniques</li> <li>TK5. Problem solving techniques such as DMAIC, FEMA</li> <li>TK6. Basic concepts of statistics</li> <li>TK7. Critical quality parameters and their values and tolerance limits.</li> <li>TK8. Quality acceptance criteria</li> <li>TK9. Understanding or deriving of calculations, as applicable</li> <li>TK10. Chemical compatibility matrix</li> <li>TK11. Material safety data sheets</li> </ul>
<b>C. Regulatory context (Knowledge of Rules and Regulations)</b>	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> <li>RK1. Factories Act and regulations</li> <li>RK2. Metrology Act and regulations</li> <li>RK3. Food Safety Act and regulations</li> <li>RK4. Compulsory Standards Act and regulations</li> <li>RK5. Environmental Management Act and regulations</li> <li>RK6. Competition and Consumer Protection Act and regulations</li> <li>RK7. Occupational Health and Safety Act and regulations</li> <li>RK8. Public Health Act and regulations, as applicable</li> </ul>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	<p>The individual on the job must be able to:</p> <ul style="list-style-type: none"> <li>CS1. Read and interpret chemical symbols and measurement results</li> <li>CS2. Read and interpret laboratory test reports.</li> <li>CS3. Read test methods and laboratory work instructions.</li> <li>CS4. Read quality control charts</li> <li>CS5. Read audit reports</li> <li>CS6. Read specifications for raw, materials, final product and packaging</li> </ul>

	CS7. Read process critical parameters. CS8. Read numbers CS9. Read material safety data sheets
	<b>Writing Skills</b>
	The individual on the job must be able to: CS9. Prepare test reports CS10. Prepare audit reports CS11. Formulate laboratory work instructions
	<b>Oral Communication (Listening and Speaking skills)</b>
	The individual on the job must be able to: CS12. Communicate effectively and fluently on matters related to quality control, in at least, English. CS13. Expertly communicate laboratory test results.
<b>B. Professional Skills</b>	<b>Plan and Organise</b>
	The individual on the job must be able to: PS1. Execute quality control tasks in an organised manner PS2. Organise activities in the laboratory
	<b>Judgment and Critical Thinking</b>
	The individual on the job must be able to: PS3. Evaluate the criticality of the quality defects and make informed decisions based on observations and experience PS4. Judge the performance of the quality control section in rendering reliable and timely services to the production process
	<b>Desire to Learn and Take Initiatives</b>
	The individual on the job must be able to: PS5. Keep up-to-date with latest trends and changes in industry and the profession PS6. Be flexible enough to adapt to emerging situations PS7. Be resilient enough to execute above expectation in midst of quality challenges PS8. Learn new test methods such as rapid testing kits
	<b>Problem Solving and Decision Making</b>
The individual on the job must be able to: PS9. Support production teams in problem solving, providing specialist assistance and techniques. PS10. Provide input in addressing challenges within the laboratory	

**UNIT 2** [This unit is about adhering to environmental, health, safety and security requirements at the workplace].

<b>Unit No.</b>	<b>02</b>
<b>Unit Title</b>	<b>Adherence to Environmental, Health, Safety and Security requirements at the Workplace</b>
<b>Description</b>	This unit is about demonstrating competence to adhere to environmental, health, safety and security at the workplace
<b>Scope</b>	<p>This unit covers the following:</p> <ul style="list-style-type: none"> <li>• Maintain a clean and efficient workplace</li> <li>• Inspect safety devices for adequacy and suitability</li> <li>• Maintain environmental, health and safety procedures at the workplace</li> <li>• Restrict access to critical areas of operations</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria (PC)</b>
<b>Maintain a clean and efficient workplace</b>	<p>To be competent, the individual must be able to:</p> <p>PC1. Adhere to the available safety and health policy.</p> <p>PC2. Identify unsafe conditions and work practices and promptly report for action.</p> <p>PC3. Handle, store and dispose equipment and materials including reagents as per documented procedure.</p> <p>PC4. Correctly identify hazardous substances with their appropriate storage and handling conditions per documented procedure.</p> <p>PC5. Adhere to documented lab safety rules, guides and practices.</p> <p>PC6. Apply 5S or other good housekeeping practices at the workplace</p> <p>PC7. Display the appropriate signage for the work being conducted</p> <p>PC8. Promptly dispose of waste safely and correctly in a designated area</p> <p>PC9. Adhere to chemical compatibility matrix is for chemical handling and storage.</p> <p>PC10. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned</p>
<b>Inspect safety devices for adequacy and suitability</b>	<p>To be competent, the individual must be able to:</p> <p>PC11. Correctly identify applicable safety devices at the workplace.</p> <p>PC12. Appropriately identify safety devices by use of signage</p> <p>PC13. Effectively use the safety devices.</p> <p>PC14. Understand the contents of material safety data sheets and ensure that the safety data sheets are available for all chemicals at the workplace.</p>
<b>Maintain environmental, health and safety</b>	<p>To be competent, the individual must be able to:</p> <p>PC15. Comply with health and safety related instructions applicable to the workplace.</p> <p>PC16. Use and maintain personal protective equipment as per documented procedure.</p>

<p><b>procedures at the workplace</b></p>	<p>PC17. Carry out own activities in line with approved guidelines and procedures.  PC18. Adhere to personal hygiene practices at the workplace.  PC19. Identify and report any machinery and equipment malfunctions that cannot be rectified.  PC20. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks.  PC21. Participate in mock drills/ evacuation procedures organized at the workplace.  PC22. Undertake first aid, fire-fighting and emergency response training, if asked to do so.  PC23. Conduct hazard analysis at the workplace.  PC24. Adhere to organization procedures for shutdown and evacuation when required.  PC25. Keep good stock of personal protective equipment for use at the workplace.</p>
<p><b>Restrict access to critical areas of operations</b></p>	<p>To be competent, the individual must be able to:  PC26. Monitor the workplace and work processes for potential risks and threats.  PC27. Adhere to available access controls especially in the laboratory working area.</p>
<p><b>Knowledge and Understanding (K)</b></p>	
<p><b>A. Organisational Context (Knowledge of the company/ organisation and its processes)</b></p>	<p>The individual on the job must be able demonstrate knowledge and understanding of:  OK1. Potential hazards, risks and threats based on nature of operation  OK2. The layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points  OK3. Applicable regulations and industry standards  OK4. Company policies on health, safety and security  OK5. Relevant management systems such as occupational health and safety  OK6. The existing site specific emergency plans</p>
<p><b>B. Technical Knowledge</b></p>	<p>The individual on the job must be able demonstrate knowledge and understanding of:  TK1. Risks associated with occupational health and safety.  TK2. Types of PPEs and their method of use  TK3. Identification, handling and storage of hazardous substances  TK4. Existing environmental guidelines on proper disposal of waste and by-products.  TK5. Signage related to health and safety and their meaning  TK6. Importance of sound health, hygiene and good habits</p>
<p><b>C. Regulatory context (Knowledge of Rules and Regulations)</b></p>	<p>The individual on the job must be able demonstrate knowledge and understanding of:  RK1. Factories Act  RK2. Environmental Management Act  RK3. Occupational Health and Safety Act  RK4. Workers' Compensation Act</p>

<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The individual on the job must be able to: CS1. Read and interpret symbols and other information documents related to environmental management, occupational health and safety
	<b>Writing Skills</b>
	The individual on the job must be able to: CS2. Document and report clearly any environmental, health and safety related incidents/accidents, in at least, English
<b>B. Professional Skills</b>	<b>Oral Communication (Listening and Speaking skills)</b>
	The individual on the job must be able to: CS3. Communicate effectively and fluently on environmental, health and safety incidents/accidents, in at least, English
	<b>Plan and Organise</b>
	The individual on the job must be able to: PS1. Execute tasks in an organised manner PS2. Work with supervisors/ team mates to keep work area free from potential hazards
<b>B. Professional Skills</b>	<b>Judgment and Critical Thinking</b>
	The individual on the job must be able to: PS3. Make appropriate and timely decisions in responding to emergencies/accidents in line with organisational guidelines
	<b>Desire to Learn and Take Initiatives</b>
	The individual on the job must be able to: PS4. Keep up-to-date with latest trends and changes in industry and the profession PS5. Be flexible enough to adapt to emerging situations PS6. Be resilient enough to execute as expected in midst of challenges
<b>B. Professional Skills</b>	<b>Problem Solving and Decision Making</b>
	The individual on the job must be able to: PS7. Support emergency response teams in problem solving



**UNIT 3** [This unit is about effectively managing personnel and team building]

<b>Unit No.</b>	<b>03</b>
<b>Unit Title</b>	<b>Manging personnel and team building</b>
<b>Description</b>	This unit is about demonstrating competence to effectively manage personnel and build teams.
<b>Scope</b>	This unit covers the following: <ul style="list-style-type: none"> <li>• Communicate effectively at the workplace</li> <li>• Carry out basic management functions of planning, organising, staffing, leading and controlling</li> <li>• Contribute to team and self-development</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria (PC)</b>
<b>Communicate effectively at the workplace</b>	To be competent, the individual must be able to: PC1. Describe the importance of team based activities and clearly highlight the key responsibilities they have as a team member PC2. Able to identify internal and external stakeholders and their expectations. PC3. Apply available and appropriate feedback mechanisms. PC4. Understand the communication channels and the associated hierarchies
<b>Providing leadership through effective supervision</b>	To be competent, the individual must be able to: PC5. Decide on the plans and take necessary steps to achieve the objectives PC6. Delegate tasks and allocate resources to individuals PC7. Determine the manpower requirements in the working area and decide their placement. PC8. Motivate and lead the staff for timely achievements of the goals. PC9. Regularly monitor the progress of work in line with agreed objectives or targets. PC10. In collaboration with HR personnel, be able to conduct training and awareness on code of conduct and company's grievance procedure. PC11. Use interpersonal skills to motivate the staff to enhance performance in line with set targets
<b>Contribute to team and self-development</b>	To be competent, the individual must be able to: PC5. Describe self-management practices and how they apply to overall team activities in the workplace PC6. Describe the importance of initiating feedback, as a team member, towards the overall team development. PC7. Describe the importance of sharing knowledge and experiences for the sake of team development. PC8. Conduct gap analysis to determine training needs
<b>Knowledge and Understanding (K)</b>	
<b>A. Organisational Context (Knowledge of the company/</b>	The individual on the job must be able demonstrate knowledge and understanding of: OK1. Company communication procedures OK2. Modes of communication and their associated restrictions OK3. Company code of ethics.

<b>organisation and its processes)</b>	OK4. Company policy on staff welfare
<b>B. Technical Knowledge</b>	The individual on the job must be able demonstrate knowledge and understanding of: TK1. Basics modes and channels of communication TK2. Technical report writing TK3. Cross-cutting issues such as gender matters and human rights, etc. TK4. Expectations of internal and external stakeholders
<b>C. Regulatory context (Knowledge of Rules and Regulations)</b>	The individual on the job must be able demonstrate knowledge and understanding of: RK1. Industrial and Labour Relations Act RK2. Employment Code Act RK3. Occupational Health and Safety Act RK4. Workers' Compensation Act
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The individual on the job must be able to: CS1. Read and interpret information related to company communication policy/procedures.
	<b>Writing Skills</b>
	The individual on the job must be able to: CS2. Document and report on relevant information, in at least, English.
	<b>Oral Communication (Listening and Speaking skills)</b>
	The individual on the job must be able to: CS3. Communicate effectively to the team(s), in at least, English.
<b>B. Professional Skills</b>	<b>Plan and Organise</b>
	The individual on the job must be able to: PS1. Plan and organise what, when, who, and how communicate based on company communication guidelines.
	<b>Judgment and Critical Thinking</b>
	The individual on the job must be able to: PS2. Through consultations and engagements with other team members, arrive at proper decisions according to various situations.
	<b>Desire to Learn and Take Initiatives</b>
	The individual on the job must be able to: PS3. Keep up-to-date with latest trends and changes in industry and the profession PS4. Be flexible enough to adapt to emerging situations PS5. Be resilient enough to execute above expectation in midst of quality challenges.
	<b>Problem Solving and Decision Making</b>
The individual on the job must be able to: PS6. Active participation in scheduled team activities rendering contributions in problem solving and overall decisions of the team	

## **5. EQUIPMENT, TOOLS AND CONSUMABLE MATERIALS**

These include, but not limited to:

- Computer with appropriate software and hardware
- Certified laboratory equipment such as pH meters, analytical balance, etc.
- Certified glass ware and other apparatus
- Certified/approved chemicals
- Certified reference materials
- Fume hold for chemical preparation
- Applicable PPE
- Approved manuals/standard operating procedures.

## **6. DILEMMAS/CHALLENGES AND COMPLEXITIES FOR A JOB HOLDER**

Dilemmas associated with the job of a Quality Controller include:

- Pressure from supervisors and clients
- Shift work
- Handling of hazardous and corrosive chemicals
- Long periods of standing especially when conducting laboratory bench works
- In a quest to uphold quality specifications it may require making difficult decisions that may not be easily acceptable to process owners and management in some cases
- Handling high volumes of work.

### **6.1 Alternative Choices (Solutions) to Dilemmas and Complexities**

- Provide appropriate PPE for all tasks
- Installation of appropriate chemical storage cabinets
- Use of safety posters/warning signs and training
- Conduct ergonomic studies
- Put fatigue management plans in place
- Structured stakeholder engagement for mutual understanding
- Proper planning and organisation of day to day tasks.

## **7. WORKING CONDITIONS/ENVIRONMENT**

- Working in a laboratory set up
- Working in confined spaces and at heights
- Working in areas that are wet, noisy, cold or hot
- May require longer standing periods.
- May involve shift work.
- May involve some exposure to chemical fumes.

## **8. PARTIES INVOLVED/INTERACTING WITH THE JOB HOLDER OR TRAINEE**

### **8.1 Internal/Within the Organisation**

Supervisors, trainers, safety, health and environment team members, other production colleagues, etc.

### **8.2 External/Outside the Organisation**

Government regulators, trainers, suppliers of equipment/tools/consumables, fellow Quality Controllers from other companies, labour unions/occupational health and safety associations, etc.

## **9. PHYSICAL DEMANDS ON THE BODY**

- Able to stand for longer periods of time, if necessary
- Able to perform some manual handling
- Generally requires one to be medically fit in line with occupational health clearance requirements
- Be able to distinguish colours, odours and textures.

## **ANNEX A**

### **Criteria for Assessments based on this NOS**

#### **A.1 Guidelines for Assessment**

**A.1.1** Criteria for assessment for curricula and learning programmes based on this NOS will be created by curricula and programmes developers. Each Performance Criteria (PC) will be assigned marks proportional to its importance in the NOS. Curricula and programmes developers will also lay down proportion of marks for theory and practical skills for each performance criteria, giving more weight to practical skills.

There shall be allocated the 'Total Mark', which will be the sum of all marks in each Unit, distributed across the number of PCs in that particular Unit. The 'out of' mark will be the mark allocated to each PC, which will be shared between theory and skills practical assessments.

**A.1.2** Individual awarding/assessment bodies or institutions and other users of the NOS will create unique question papers for the theory part and evaluations for skill practical part for their respective candidates.

## ANNEX B NOS Version Control

This Annex gives details necessary for the tracking of the NOS versions based on the number of revisions.

<b>NOS Code</b>	NOS.QC.01		
<b>ZQF Level</b>	6	<b>Version Number</b>	01
<b>Sector</b>	Manufacturing	<b>Date of Approval</b>	February, 2021
<b>Sub Sector</b>	All subsectors in the Manufacturing sector	<b>Date of Last Review</b>	N/A
<b>Occupation</b>	Quality Management/Control	<b>Date of Next Review</b>	March, 2026

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