



NATIONAL OCCUPATIONAL STANDARD FOR WASTE MANAGEMENT OFFICER

ZAMBIA QUALIFICATIONS AUTHORITY

**DNOS.WMO.01
FIRST EDITION**

APPROVING AUTHORITY

This National Occupational Standard has been prepared and published under the authority of the Zambia Qualifications Authority Board on [insert date when NOS was approved by the ZAQA Board].

ZAMBIA QUALIFICATIONS AUTHORITY

The Zambia Qualifications Authority Act No. 8 of 2024 was enacted by the Government of the Republic of Zambia to ***“continue the existence of the Zambia Qualifications Authority and redefine its functions; provide for the development and implementation of a national qualifications framework; provide for registration of qualifications on the national qualifications framework; provide for verification and evaluation of qualifications; constitute the board of the Zambia Qualifications Authority and redefine its functions; 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 Water National Occupational Standards Development Team, upon which the following organisations were represented:

- | | | | |
|----|--|----|---|
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| 02 | Ministry of Green Economy and Environment (MGEE) | 07 | University of Zambia |
| 03 | Ministry of Water Development and Sanitation | 08 | Zambia Environmental Management Agency (ZEMA) |
| 04 | Water Resources Management Authority | 09 | Zambia Qualifications Authority – Secretariat |
| 05 | Natural Resources Development College (NRDC) | | |

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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. 8 of 2024 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 Water 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 Water sector, demonstration of competence against this NOS may be required in order to run a business or practice a craft or profession.

JUSTIFICATION

The Waste Management Officer is one of the critical occupations in the water sector which is common in various other sectors. Water, apart from being an economic good, also provides important ecological and social values. As the demand for the scarce commodity continues to grow, the need for skilled professionals to manage environmental and waste management aspect become increasingly important. This is where the Waste Management Officer comes in.

The Waste Management Officer should be able to manage waste disposal, collection and recycling. The officer also has the important role of advising and enforcing waste management regulations.

The job has a solid regulatory focus and will also assist in implementing rules and evaluating environmental compliance. The development of this National Occupational Standard will ensure relevance of the training to latest advancements in industry, resulting in adequately and appropriately skilled Waste Management Officers.

Creating an Occupational standard for the Waste Management Officer in the Water sector will help individuals in this role possess the necessary knowledge, skills, attributes and competencies to be successful in their jobs.

ACRONYMS AND ABBREVIATIONS

WMO	Waste Management Officer
CS	Core Skill
DNOS	Draft National Occupational Standard
ISO	International Organizational Standards
NOS	National Occupational Standard
NOSDT	National Occupational Standards Development Team
OK	Organisational Knowledge
PC	Performance Criteria
PS	Professional Skill
RPL	Recognition of Prior Learning
SOP	Standard Operating Procedure
TK	Technical Knowledge
ZAQA	Zambia Qualifications Authority
ZQF	Zambia Qualifications Framework
OSHE	Occupational Safety, Health and Environment

GLOSSARY OF TERMS

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

Applied Sciences:	Are studies that involve the practical application of scientific knowledge and principles to real world problems. These include advanced levels of physics, chemistry and biology.
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.
Disability:	Physical or mental impairment that substantially limits one or more major life activities.
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.

1.0 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.

NOS Code	DNOS.WMO.01
Occupation	Waste Management Officer
Job Title	Waste Management Officer
Job Description	A Waste Management Officer undertakes environmental health monitoring, oversees waste collection, transportation and disposal in the premises of operation. Conducts waste management planning, implementation of waste management policies, laws and regulations, implements strategies that promote climate smart disposal of waste , coaching and mentoring of subordinates, training of communities on waste minimization, resource efficiency, recycling and reuse of waste.
Job Purpose	Waste Management Officer is responsible for minimizing waste generation, promotion of sustainable waste management practices, ensuring of proper waste collection, transportation and disposal. The Officer is also responsible for encouraging recycling and promotion of technologies of recovering of energy from waste.
ZQF Level	7
Sector	Water
Sub sector	Waste Management
Other Economic Sector(s) in which the Occupation is Practiced	Mining, Construction, Agriculture, Fisheries, Manufacturing, Energy etc.
Other Similar Jobs that can be Performed in the Occupation	Safety Supervisor, Health and Environment Manager, Environmental Inspector, Public Health Inspector, Training Officer, Environment, Health and Safety Manager, etc.

Minimum Educational Job Entry Qualification(s)	Applied Sciences, Degree in Environmental Science, Chemical Engineering, Environmental Engineering, Civil Engineering, Public Health or equivalent
Practicing License Requirements (if any)	Membership with the Engineering Institution of Zambia for Engineers, Chemical Society of Zambia for Chemists or any relevant professional organization
Training/RPL (Suggested)	1. First aid 2. ICTS 3. ISO Standards
Minimum Job Entry Age	22 years
Prior Experience (Recommended)	1-year experience or Internship
Performance Criteria	As described in the Units under Section 4

2.0 SCOPE

This National Occupational Standard highlight core knowledge, skills, competences and personal attributes that a Waste Management Officer must possess to be successful in their job.

3.0 PERSONAL ATTRIBUTES (VALUES, ETHICS AND ATTITUDES)

This job requires ability to do planning, assessments, reporting and prioritizing, ability to work in a team, physique to sustain strenuous conditions, high technological exposure to handle various equipment, tools and materials, sensitivity towards safety for self, others and equipment, willingness to work across various locations, be well versed with tasks, functions, standards, specifications, codes of practice and safety norms applicable to environment and waste management facilities, be honest, collaborative, accountable, transparent, professional, strong interpersonal skills, managing competing demands and results oriented etc.

4.0 UNITS AND ELEMENTS

This National Occupational Standard is divided into **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 on Environmental Management]	
Unit No.	01
Unit Title	Environmental Management
Description	This Unit describes the skills and knowledge required to undertake Environmental Management
Scope	This Unit covers the following: • Assessments, analysis and technical reports; • Surveillance and monitoring of sites; • Environmental Policy and legislation; and • Environmental remediation.

UNIT 1 [This unit is on Environmental Management]

Performance Criteria (PC) with respect to the Scope

Element	Performance Criteria (PC)
Assessments, Analysis and Technical Reports	To be competent, the individual must be able to: • PC1: Monitor and assess environmental compliance standards within the work premises • PC2: Analyse and interpret the data from the assessment. • PC3: Undertake vulnerability analysis and risk rating. • PC4: Report and disseminate the results of the assessment
Surveillance and Monitoring of Sites	To be competent, the individual must be able to: • PC 5: Develop a surveillance monitoring plan • PC 6: Undertake baseline, midline and endline survey • PC7: Undertake surveillance to identify the sources of waste • PC8: Use tools and equipment for mapping the area
Environmental Policy and Legislation	To be competent, the individual must be able to: • PC9: Interpret and apply environmental legislation standards and regulatory framework • PC10: Interpret and apply the National Policy on Environment • PC11: Enforce the law on environment management
Environmental remediation	To be competent, the individual must be able to: • PC12. Prepare environmental restoration and management plans. • PC13. Undertake remediation interventions. • PC14. Engage stakeholders on restoration and management plans. • PC15. Undertake assessment of effectiveness of remediation interventions.

UNIT 1 [This unit is on Environmental Management]

Knowledge and Understanding (K)

A. Organisation- al Context (Knowledge of the company/ organisation and its processes)

The individual on the job must demonstrate knowledge and understanding of:

- OK1. Standard operating procedures
- OK2. Organization policies, rules and guidelines on environment and waste
- OK3. National Policy and Legislation on environment and waste
- OK4. International agreements and protocols
- OK5. Organizational strategies

B. Technical Knowledge

The individual on the job must demonstrate knowledge and understanding of:

- TK1. Waste Management assessment processes
- TK2. Stakeholder engagement principles
- TK3. Software packages for analysis and generation of reports
- TK4. Development, implementation and review of environmental management systems
- TK5. Environmental guidelines and procedures
- TK6. Personal health and safety requirements
- TK7. Conflict resolution procedures
- TK8. Code of conduct, ethics and grievance procedures
- TK9. Community complaint and feedback mechanisms

C. Regulatory context (Knowledge of rules and regulations)

The individual on the job must demonstrate knowledge and understanding of:

- RK1. Laws and regulations related to environment, waste management, water, sanitation, public health, green economy and occupational health and safety

UNIT 1 [This unit is on Environmental Management]

skills (s)

A. Core Skills/ Generic Skills

Writing Skills

The individual on the job must be able to:

- CS1. Write in English (at least working level) and be able to or have the means to give simple instructions in the local language used at the site
- CS2. Prepare and provide clear and simple instructions, details and sketches to co-workers
- CS3. Possess presentation skills

Reading Skills

The individual on the job must be able to:

- CS4. Read English and be able to or have the means to give simple instructions in the local language used at the site
- CS5. Read and interpret sketches, drawings or instructions provided for the required work
- CS6. Read and interpret various safety and general signage, safety rules and tags, etc., provided at the workplace, including directions for exit routes during emergencies

Oral Communication (Listening and Speaking skills)

The individual on the job must be able to:

- CS7. Speak in English (at least working level) and be able to or have the means to give simple instructions in the local language used at the site
- CS8. Listen attentively and interpret communication/ instructions from the supervisor and other co-workers
- CS9. Convey information clearly and concisely to co-workers
- CS10. Respond appropriately to any queries

UNIT 1 [This unit is on Environmental Management]

B. Professional Skills

Decision Making

The individual on the job must be able to:

- PS1. Determine and report to the superior whether it is safe to handle the particular task
- PS2. Follow organization rule-based decision-making process.
- PS3. Make decisions in emergencies in the absence of the supervisor

Plan and Organise

The individual on the job should be able to:

- PS4. Prepare and contribute to annual budgets and work plans
- PS5. Prepare surveillance and monitoring plans
- PS6. Plan for stakeholder engagement meetings
- PS7. Prepare plans for emergencies

Problem Solving

The individual on the job should be able to:

- PS8. Identify trends in environmental management and recommend solutions
- PS9. Analyse environmental data to identify potential areas of concern
- PS10. Apply mathematical models and techniques to create solutions to environmental management problems

Analytical Thinking

The individual on the job should be able to:

- PS11. Analyse the information received from subordinates
- PS12. Analyse potential remedial measures and convey them to superiors for action
- PS13. Analyse data and information for decision making
- PS14. Use software packages for data analysis

UNIT 1 [This unit is on Environmental Management]

Critical Thinking

The individual on the job should be able to:

- PS15. Use logic and reasoning to identify environmental problems and propose solutions
- PS16. Ask relevant questions for better understanding of environmental problems
- PS17. Use innovation techniques to come up with solutions

UNIT 2 [This Unit is on Waste Management]

Unit No.

02

Unit Title

Waste Management

Description

This Unit describes the skills and knowledge required to undertake Waste Management

Scope

This Unit covers the following:

- Waste management planning;
- Implementation of waste collection;
- Implementation of Waste Management and Sanitation policies, laws and regulations and ensure compliance with regulatory requirement.

Performance Criteria (PC) with respect to the Scope

Element

Performance Criteria (PC)

Waste management planning

To be competent, the individual must be able to:

- PC1: Waste assessment;
- PC2: Target setting for waste recycling, reduction and disposal;
- PC3: Develop strategies and initiatives
- PC4: Monitoring and evaluation.

UNIT 2 [This Unit is on Waste Management]

Implementation of waste collection

To be competent, the individual must be able to:

- PC5: Develop a waste collection plan, e.g. route optimization, scheduling and resource allocation;
- PC6: Development of waste collection infrastructure, e.g. sewer networks, bins, containers or vehicles;
- PC7: Waste segregation;
- PC8: Proper collection and transportation of waste;
- PC9: Safe disposal.

Implementation of Waste Management and Sanitation policies, laws and regulations and ensure compliance

To be competent, the individual must be able to:

- PC10: Familiarization of applicable policies, laws and regulations;
- PC11: Identification of enforcement mechanism;
- PC12: Inspect and enforcement Waste Management and Sanitation laws and regulations;
- PC13: Public education on sustainable waste management and sanitation practices;
- PC14: Forge collaboration and partnerships

Knowledge and Understanding (K)

D. Organisational Context (Knowledge of the company/ organisation and its processes)

The individual on the job must demonstrate knowledge and understanding of:

- OK1. Standard operating procedures
- OK2. Organization policies, rules, and guidelines on waste and sanitation;
- OK3. International agreements and protocols on waste and sanitation;
- OK4. Organizational strategies;
- OK5. Knowledge and understanding of checklists for waste generation and storage points.

UNIT 2 [This Unit is on Waste Management]

E. Technical Knowledge

The individual on the job must demonstrate knowledge and understanding of:

- TK1. Waste characterization
- TK2. Risks associated with different waste streams
- TK3. National and international standards, guidelines, and procedures
- TK4. Implementation and review of waste management strategy
- TK5. Techniques in waste recycling and treatment
- TK6. Personal health and safety requirements
- TK7. Preventive and remedial actions in case of exposure to toxic or infectious waste
- TK8. Conflict resolution procedures
- TK9. Code of Conduct, ethics, and grievance procedures
- TK10. Community complaint and feedback mechanisms

F. Regulatory context (Knowledge of rules and regulations)

The individual on the job must demonstrate knowledge and understanding of:

- RK1. Laws and regulations related to waste management, sanitation, environmental management, green economy, water, public health, and occupational health and safety

Skills (s)

C. Core Skills/ Generic Skills

Writing Skills

The individual on the job must be able to:

- CS1. Write in English (at least working level) and be able to or have the means to give simple instructions in the local language used at the site
- CS2. Prepare and provide clear and simple instructions, details, and sketches to co-workers
- CS3. Possess presentation

UNIT 2 [This Unit is on Waste Management]

Reading Skills

The individual on the job must be able to:

- CS4. Read English and be able to or have the means to give simple instructions in the local language used at the site
- CS5. Read and interpret sketches, drawings or instructions provided for the required work
- CS6. Read and interpret various safety and general signage, safety rules and tags, etc., provided at the workplace, including directions for exit routes during emergencies

Oral Communication (Listening and Speaking skills)

The individual on the job must be able to:

- CS7. Speak in English (at least working level) and be able to or have the means to give simple instructions
- CS8. Use known technical language to communicate with the public
- CS9. Listen attentively and interpret communication/ instructions from the supervisor and other co-workers
- CS10. Convey information clearly and concisely to co-workers
- CS11. Respond appropriately to any queries

D. Professional Skills

Decision Making

The individual on the job must be able to:

- PS1. Determine and report to the superior whether it is safe to handle the particular task
- PS2. Follow organization rule-based decision-making process.
- PS3. Make decisions in emergency situations in the absence of the supervisor

UNIT 2 [This Unit is on Waste Management]

Plan and Organise

The individual on the job should be able to:

- PS4. Prepare and contribute to annual budgets and workplans
- PS5. Prepare waste management plans
- PS6. Plan for stakeholder engagement meetings
- PS7. Prepare plans for emergencies

Problem Solving

The individual on the job should be able to:

- PS8. Identify trends in waste generation and recommend solutions
- PS9. Analyse waste data to identify potential areas of concern
- PS10. Apply mathematical models and techniques to create solutions to waste management problems

Analytical Thinking

The individual on the job should be able to:

- PS11. Analyse the information received from subordinates
- PS12. Analyse potential remedial measures and convey them to superiors for action
- PS13. Analyse data and information for decision making
- PS14. Use software packages for data analysis

Critical Thinking

The individual on the job should be able to:

- PS15. Use logic and reasoning to identify waste management problems and propose solutions
- PS16. Ask relevant questions for better understanding of waste management problems
- PS17. Use innovative techniques to come up with solutions

UNIT 3 [This Unit is about climate change adaptation and mitigation interventions].

Unit No.	03
Unit Title	Climate Change Adaptation and Mitigation Interventions
Description	This Unit describes the skills and knowledge required to undertake and support climate change adaptation and mitigation interventions.
Scope	This Unit covers the following: • Climate change adaptation mechanisms in waste management • Climate change mitigation mechanisms in waste management
Performance Criteria (PC) with respect to the Scope	
Element	Performance Criteria (PC)
Climate Change adaptation mechanisms	To be competent, the individual must be able to: • PC1. Identify causes of climate change in waste management e.g human activities that increase greenhouse gases e.g incineration of solid waste, waste collection vehicles consumption of fuel and release of carbon dioxide • PC2. Identify Impacts of climate change in waste management e.g Damage to waste disposal infrastructure, Water Quality degradation, ecosystem changes, unpredictable seasonal variations etc • PC3. Prepare community action planning on adaptation mechanisms. • PC4. Capture information that could help the communities adapt and build resilience to climate variability (rainfall variability, floods etc). • PC5. Share information on climate change early warning systems. • PC6. Report on climate variability effects from the communities.

UNIT 3 [This Unit is about climate change adaptation and mitigation interventions].

Climate Change mitigation mechanisms

To be competent, the individual must be able to:

- PC7. Plan climate change mitigation mechanisms.
- PC8. Implement campaigns on mitigation mechanism (tree planting, agroforestry etc).
- PC9. Map vulnerable communities
- PC10. Implement climate smart strategies e.g 3Rs, climate resilient waste infrastructure, nature based solutions

Knowledge and Understanding (K)

A. Organisation- al Context (Knowledge of the company/ organisation and its processes)

The individual on the job must demonstrate knowledge and understanding of:

- OK1. Standard operating procedures.
- OK2. Organisation policies, regulations and guidelines on safety health and environment, safeguarding equipment and workplace.
- OK3. International agreements and protocols that the government is party to.
- OK4. Organisation strategy on Climate Change.
- OK5. Institutional framework (stakeholder mapping)

UNIT 3 [This Unit is about climate change adaptation and mitigation interventions].

B. Technical Knowledge

The individual on the job must demonstrate knowledge and understanding of:

- TK1. Climate change adaptation and mitigation.
- TK2. The role of proper waste management in climate change adaptation and mitigation.
- TK3. Local community adaptation, peace and conflict mechanisms
- TK4. Multilateral agreements on climate change.
- TK5. Policies and regulations on climate change
- TK6. Climate change early warning systems
- TK7. Preparation of action planning on adaptation and mitigation mechanisms.
- TK8. Mainstreaming gender in climate adaptation and mitigation.
- TK9. Participatory approaches to climate change
- TK10. Climate change technology transfer
- TK11. The role of Indigenous knowledge on climate change adaptation and mitigation.
- TK12. Global and local climate trends, impacts, challenges, and concerns

C. Regulatory Context (Knowledge of rules and regulation)

The individual on the job must demonstrate knowledge and understanding of:

RK1. The laws and regulations related to the environment, water, forests, green economy, waste management and sanitation, climate change, public health, and occupation health and safety

Skills (S)

A. Core Skills/ Generic Skills

Writing Skills

The individual on the job must be able to:

- CS1. Write in English (at least working level) and be able to or have the means to give simple instructions in the local language used at the site.
- CS2. Prepare and provide clear and simple written instructions, as well as provide details and sketches to co-workers.
- CS3. Possess presentation skills.

UNIT 3 [This Unit is about climate change adaptation and mitigation interventions].

Reading Skills

The individual on the job must be able to:

- CS4. Read English and be able to or have the means to give simple instructions in the local language used at the site
- CS5. Read and interpret sketches, drawings or instructions provided for the required work
- CS6. Read and interpret various policies, legislation and multilateral environmental agreements (MEAs) on climate change.

Oral Communication (Listening and Speaking skills)

The individual on the job must be able to:

- CS6. Speak in English (at least working level) and be able to or have the means to give simple instructions in the local language used at the site.
- CS7. Listen attentively and interpret communication/ instructions from the supervisor and other co-workers.
- CS8. Use plain language to convey information clearly and concisely to co-workers.

B. Professional Skills

Decision Making

The individual on the job must be able to:

- PS1. Determine and report to the superior whether it is safe to carry out the tasks.
- PS2. Follow the organisation rule-based decision-making process.
- PS3. Apply evidence-based decision processes and synthesize relevant data to make policy recommendations.
- PS3. Make decisions in emergency situations in the absence of the supervisor.

UNIT 3 [This Unit is about climate change adaptation and mitigation interventions].

Plan and Organise

The individual on the job should be able to:

- PS4. Plan work and organise required resources in coordination with team members and superiors.
- PS5. Prepare and contribute to annual work plans and budgets.
- PS6. Prepare climate change adaptation and mitigation plans.

Problem Solving

The individual on the job should be able to:

- PS7. Identify trends in meteorological data and recommend solutions
- PS8. Analyse meteorological data and interpret new information to identify potential areas of concern
- PS9. Apply numerical models and techniques to create solutions
- PS10. Use logic and creativity to develop innovative solutions.

Analytical Thinking

The individual on the job should be able to:

- PS12. Analyze the information received from officers and subordinates.
- PS13. Analyse and convey to the superior and carry out remedial action.
- PS14. Analyse vulnerability and risk patterns in climate change.
- PS15. Use data and information for decision-making
- PS16. Use data and information for evidence-based advocacy.
- PS17. Use software packages for analysis.

Critical Thinking

The individual on the job should be able to:

- PS18. Ask relevant questions for accuracy and better understanding.
- PS19. Come up with innovative solutions.

5.0 EQUIPMENT, TOOLS AND CONSUMABLE MATERIALS

Equipment, tools and consumable materials used by the job holder include, but are not limited to:



Hand Tools

Log books, Spanners, Brushes, Rake, Shovels, Waste sampling tools, Hoses, Radios, Walkie-talkies, GPS, Camera, Calculator, Shredders, Drone, etc.



Measuring Instruments

Scale, Measuring tape, Rope, radiation detectors etc.



Power Tools

Screwdrivers, Nail gun, etc.



Consumables and General requirements

Waste collection bags, Bins, Drums, Booms, Absorbent materials, Spills neutralization kit, Cotton wool, Mutton Cloth, Methylated Spirit, Stationery, Cleaning Detergents, First aid kit, Fire extinguishers, etc.



Personal Protective Equipment

Overalls, Safety helmet, Safety goggles, Safety shoes, PVC gloves, Ear plugs, Reflective jackets, Gas mask, Dust mask, Fire prevention kit, etc.

6.0 DILEMMAS/CHALLENGES AND COMPLEXITIES FOR A JOB HOLDER

Dilemmas associated with the job of Waste Management Officer include: exposure to electrical power supply, working around and with machinery having moving parts, working in dangerous areas with likelihood of sharp or falling materials and objects, working in extreme weather such as hot and cold conditions, working in wet and dusty environments, exposure to fumes and odours, long working hours, pressure from supervisors and colleagues, pressure from government regulators, etc.

7.0 Alternative Choices (Solutions) to Dilemmas and Complexities

Solutions to dilemmas include wearing protective clothing and ensuring their availability and use by other employees, exercising regularly to maintain physical fitness, exercising proper work ergonomics, participating in workplace safety sensitisation and awareness meetings/training sessions, adhering to company's safety and standard operating procedures at all times, consulting extensively within and outside one's department/team on waste management issues, planning and prioritising work, etc.

8.0 WORKING CONDITIONS/ENVIRONMENT

Working conditions include indoor and outdoor waste management sites as well as handling machines with moving parts, working in conditions that may be dusty and wet, exposure to seasonal heat and cold or adverse weather conditions, emergency callouts, standing for long hours. In most cases, the job involves working normal hours, but in some instances, shift work and regular overtime may be required. The job also requires wearing suitable protective clothing such as works suits, ear protectors, safety visors or goggles, gloves and hardhats, etc.

9.0 PARTIES INVOLVED / INTERACTING WITH THE JOB HOLDER OR TRAINEE

9.1 Internal/Within the Organisation

Parties involved/interacting with the job holder who are internal to the organization include supervisors/superiors, trainers, occupational health and safety team, other colleagues, etc.

9.2 External/Outside the Organisation

Parties involved/interacting with the job holder who are external to the organization include government regulators, trainers, clients, suppliers of equipment/ tools/ consumables, fellow Environment and Waste Management Officers from other companies, labour unions/ occupational health and safety associations, communities, etc.

10.0 PHYSICAL DEMANDS ON THE BODY

- Walk and stand for long periods of time;
- Bend, stretch, twist, or reach out;
- Use fingers, hands and feet with ease to complete the assigned task (dexterity); Etc.

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 skills 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.

NOS Code	DNOS.EWMO.01		
ZQF Level	7	Version Number	01
Sector	Water	Date of Approval	
Sub Sector	Sanitation and Waste Management	Date of Last Review	N/A
Occupation	Environment and Waste Management Officer	Date of Next Review	



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