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**SOUTH AFRICAN QUALIFICATIONS AUTHORITY
REGISTERED UNIT STANDARD:**

Separate, handle, store, treat and transport waste

SAQA US ID	UNIT STANDARD TITLE			
119555	Separate, handle, store, treat and transport waste			
ORIGINATOR		ORIGINATING PROVIDER		
SGB Environmental Sc/Mgt & Waste Mgt				
QUALITY ASSURING BODY				
-				
FIELD			SUBFIELD	
Field 10 - Physical, Mathematical, Computer and Life Sciences			Environmental Sciences	
ABET BAND	UNIT STANDARD TYPE	OLD NOF LEVEL	NEW NOF LEVEL	CREDITS
Undefined	Regular	Level 2	NQF Level 02	9
REGISTRATION STATUS		REGISTRATION START DATE	REGISTRATION END DATE	SAQA DECISION NUMBER
Reregistered		2009-05-05	2012-05-05	SAQA 0160/05
LAST DATE FOR ENROLMENT		LAST DATE FOR ACHIEVEMENT		
2013-05-05		2016-05-05		

In all of the tables in this document, both the old and the new NQF Levels are shown. In the text (purpose statements, qualification rules, etc), any reference to NQF Levels are to the old levels unless specifically stated otherwise.

This unit standard does not replace any other unit standard and is not replaced by any other unit standard.

PURPOSE OF THE UNIT STANDARD

In order for me to perform effectively in the field of environmental science, environmental management and waste management, I will be able to:

- Classify, separate, treat, store and transport waste safely, responsibly and in compliance with legislation
- Control and monitor access to a waste handling facility.

I will also know and understand:

- Principles and concepts related to waste management and their application in practice
- Methods of handling and transporting waste.

It can be assessed against this unit standard in the context of any waste handling activity. The skill, the knowledge and the values reflected in this unit standard form part of the exit level outcomes required for the National Certificate in Environmental Practice NQF Level 2.

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

It is assumed that the learner is competent in Communication and Mathematical literacy skills at NQF Level 1

UNIT STANDARD RANGE

The scope and level of this unit standard is indicated by range statements related to the Specific Outcomes.

This unit standard is appropriate for learners who specialise in the field of waste management.

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Separate, treat and store waste.

OUTCOME RANGE

- Includes handling and treatment methods for water, effluent, waste, solids and gas.
- Treatment includes shredding, chopping, baling, compacting, neutralising, blending, incinerating, densifying, etc.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

Waste is separated into the various categories and processed appropriately.

ASSESSMENT CRITERION RANGE

Various categories: general, hazardous, biodegradable, recoverable, etc.

ASSESSMENT CRITERION 2

Handling, treatment and storage methods are selected and applied for each category of waste correctly.

ASSESSMENT CRITERION 3

Work is carried out safely and with due care for self, fellow workers, equipment, materials and the environment.

ASSESSMENT CRITERION RANGE

Safely: correct techniques and procedures are used to handle waste; safe working practices are applied, appropriate protective clothing and equipment is used.

ASSESSMENT CRITERION 4

Environmentally damaging practices are recognised and reported timeously and accurately.

ASSESSMENT CRITERION 5

Incidents and problems related to waste handling, storage and treatment are discussed and explained appropriately and accurately.

ASSESSMENT CRITERION RANGE

Incidents and problems: includes impact of hazardous waste on the environment.

SPECIFIC OUTCOME 2

Transport waste.

OUTCOME RANGE

Transport refers to on-site movement of waste.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

Waste is loaded, moved, off-loaded and positioned efficiently and as required.

ASSESSMENT CRITERION 2

Operations are carried out to quality standards efficiently and safely.

ASSESSMENT CRITERION RANGE

Operations include securing and releasing load, placing load correctly.

ASSESSMENT CRITERION 3

Work is carried out safely and with due care for self, fellow workers, equipment, materials and the environment.

ASSESSMENT CRITERION RANGE

Safety: correct techniques and procedures are used to transport waste; safe working practices are applied, appropriate protective clothing and equipment is used.

ASSESSMENT CRITERION 4

Incidents and problems are reported timeously and appropriate action is taken.

ASSESSMENT CRITERION RANGE

Incidents and problems could include non-compliance with legislation and site or equipment requirements; inappropriate waste; hazardous conditions.

SPECIFIC OUTCOME 3

Control access and monitor the flow of incoming materials to a waste facility.

OUTCOME RANGE

Incoming materials include waste, consumables and equipment.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

Materials are allowed to enter the site in accordance with organisational procedures.

ASSESSMENT CRITERION 2

Non-compliant waste is recognised and appropriate action is taken.

ASSESSMENT CRITERION 3

Security of the facility, equipment and resources is maintained appropriately.

ASSESSMENT CRITERION RANGE

Includes recognising and reporting potential and/or actual breaches of security, accounting for

consumables used and storing or immobilising equipment and resources.

SPECIFIC OUTCOME 4

Recognise and report threats or damage to health, safety or the environment.

OUTCOME RANGE

This outcome includes an awareness of appropriate preventive, corrective or remedial actions.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

Potential dangers to health, safety and the environment which can arise during the processes of handling, separating, treating, storing and transporting waste are identified and described accurately and appropriately.

ASSESSMENT CRITERION 2

Measures which can be taken to prevent, correct or remedy threats or damage to health, safety or the environment are explained correctly.

SPECIFIC OUTCOME 5

Compile relevant records.

OUTCOME RANGE

Includes incident reports, operational records, maintaining confidentiality of information (organisational and client).

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

Records are completed accurately, up to date and processed correctly.

UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS

To obtain credits I must be assessed. The assessment will be based on evidence that I produce. My assessment will be governed by the policies and guidelines of a relevant Education and Training Quality Assurance body (ETQA), which has jurisdiction over this field of learning. The policies and procedures of the relevant ETQA will also determine:

- How my assessment is moderated
- How I can appeal against the outcome of the assessment

Any institution or company which offers learning that will enable me to achieve the purpose of this unit standard must be accredited as a provider through the relevant ETQA

My assessment against this standard should meet all the requirements of established principles. It should include practical assessment activities, which are appropriate to the contents of this unit standard. These activities should include an appropriate combination of self and peer assessment, practical and oral assessments, observations, etc.

I can be assessed in the language of my choice although if I have to report incidents or conditions to someone else, I will be assessed on my ability to report in the language commonly used in my working environment.

I will be assessed on all the Specific Outcomes, Critical Cross-Field Outcomes and Essential Knowledge Embedded Knowledge. The Specific Outcomes must be assessed in their own right, through oral and practical evidence. My assessment will not only be based on observation but also on other evidence which I compile into a portfolio of evidence. I cannot be assessed only through a written or oral test.

The Specific Outcomes and Essential Embedded Knowledge will be assessed in relation to each other. If I am able to explain the items which fall under the heading of Essential Embedded Knowledge, but am unable to perform the Specific Outcomes, then I cannot be assessed as 'competent'. Similarly, if I am able to perform tasks described under the Specific Outcomes, but cannot explain or justify them in terms of the fundamental concepts, principles and practice relevant to the level of the unit standard that underpins my skill, then I cannot be assessed as 'competent'.

I will also be assessed on my ability to apply the principles and techniques related to the Critical Cross-Field Outcomes, not only in terms of what I can demonstrate, but also in terms of what I know and can discuss.

My assessment for this unit standard can be done in conjunction with the assessment of other unit standards related to a qualification, and even in conjunction with my assessment for the qualification as a whole.

UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE

The following items reflect the type of knowledge that the assessor will evaluate

Names & functions of:

- Types of waste
- Handling and treatment methods
- Terminology related to the waste stream

Purpose of:

- Separating and treating waste
- Inspecting containers and equipment
- Using personal protective clothing and equipment
- Standard operating procedures

Attributes, descriptions, characteristics & properties:

- Properties of the various types of waste
- Methods of storing, treating and transporting waste
- Characteristics of equipment and materials used in waste handling processes
- Records required
- Personal protective equipment

Processes and events:

- Chemical, physical and biological methods of treating waste

Causes and effects, implications of:

- Effects of chemical and physical properties of waste on equipment, health and the environment
- Benefits and disadvantages of treatment methods
- Not following correct operational procedures

Procedures and techniques:

- Monitoring in-coming waste
- Separating, treating, storing and transporting waste
- Inspecting containers
- Responding to environmental threats
- Dealing with inappropriate waste
- Recording and reporting
- Dealing with emergencies

Sensory cues:

- Related to recognising potential and actual threats or damage to the environment
- Related to anticipating and responding to conditions that could interfere with safe and efficient operations
- Related to maintaining security

Regulations, legislation, agreements, policies, standards:

- Related to handling, storing, treating and transporting waste
- Related to the site / organisation

- Related to controlling access to the site
- Related to health and safety

Theory: rules, principles, laws:

- Science and technology related to handling, storing, treating and transporting waste
- Optimal payload
- Relevant principles of waste management

Categories:

- Types of waste

Relationships, systems:

- Relationships between the characteristics of the waste and the methods of treatment, storage and transport used

UNIT STANDARD DEVELOPMENTAL OUTCOME

N/A

UNIT STANDARD LINKAGES

N/A

Critical Cross-field Outcomes (CCFO):

UNIT STANDARD CCFO IDENTIFYING

Identify and solve problems

- Related to the characteristics of the waste and the methods of treatment, storage and transport.

UNIT STANDARD CCFO WORKING

Work effectively with others

- Work safely with due care for the health and well-being of others.

UNIT STANDARD CCFO ORGANISING

Organise and manage myself and my activities

- Carry out activities in accordance with procedures for treating, storing and transporting waste.

UNIT STANDARD CCFO COLLECTING

Collect, analyse, organise and critically evaluate information

- Use sensory information to identify types of waste and to monitor the processes of separation, treatment, storage and transport.
- Record information related to separation, treatment, storage and transport of waste.

UNIT STANDARD CCFO COMMUNICATING

Communicate effectively

- Report environmentally damaging incidents.

UNIT STANDARD CCFO SCIENCE

Use science and technology effectively and critically

- Apply knowledge of waste treatment methods to carry out operations effectively and safely.

UNIT STANDARD CCFO DEMONSTRATING

Demonstrate an understanding of the world as a set of related systems

- Recognise the interrelationship between the properties of the waste, the characteristics of the treatment, storage and transport methods, and the impact on the environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD:

	ID	QUALIFICATION TITLE	OLD LEVEL	NEW LEVEL	STATUS	END DATE	QUALITY ASSURING BODY
Elective	49605	National Certificate: Environmental Practice	Level 2	NQF Level 02	Reregistered	2012-06-30	LG SETA
Elective	58785	National Certificate: Production Technology	Level 3	NQF Level 03	Reregistered	2012-06-30	MERSETA

PROVIDERS CURRENTLY ACCREDITED TO OFFER THIS UNIT STANDARD:

This information shows the current accreditations (i.e. those not past their accreditation end dates), and is the most complete record available to SAQA as of today. Some Quality Assuring Bodies have a lag in their recording systems for provider accreditation, in turn leading to a lag in notifying SAQA of all the providers that they have accredited to offer qualifications and unit standards, as well as any extensions to accreditation end dates. The relevant Quality Assuring Body should be notified if a record appears to be missing from here.

1. African Divas
2. ICANDO
3. Integrated Waste and Recycling Services

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