Select, use and care for hand tools and basic equipment in environmentally related contexts

<table>
<thead>
<tr>
<th>SAQA US ID</th>
<th>UNIT STANDARD TITLE</th>
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<tbody>
<tr>
<td>119302</td>
<td>Select, use and care for hand tools and basic equipment in environmentally related contexts</td>
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</table>

ORIGINATING PROVIDER

SGB Environmental Sc/Mgt & Waste Mgt

QUALITY ASSURING BODY

-

FIELD

Field 10 - Physical, Mathematical, Computer and Life Sciences

SUBFIELD

Environmental Sciences

<table>
<thead>
<tr>
<th>ABET BAND</th>
<th>UNIT STANDARD TYPE</th>
<th>OLD NQF LEVEL</th>
<th>NEW NQF LEVEL</th>
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<td>Regular</td>
<td>Level 1</td>
<td>NQF Level 01</td>
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REGISTRATION STATUS

Reregistered

REGISTRATION START DATE

2009-07-01

REGISTRATION END DATE

2012-06-30

SAQA DECISION NUMBER

SAQA 0480/09

LAST DATE FOR ENROLMENT

2013-06-30

LAST DATE FOR ACHIEVEMENT

2016-06-30

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:

- Select the appropriate tools or equipment for the purpose
- Use the tools or equipment correctly to achieve the purpose
- Care for and store the tools and equipment

I will also know and understand:

- The reasons for the activities I engage in
- The principles which underpin my activities

I can be assessed against this unit standard in the context of any activity which is related to managing environmental issues, such as:

- Clearing invasive species and water courses
- Land development projects
- Collecting and processing waste
- Working in community initiatives with an environmental focus
- Collecting and processing samples
- Preventing and responding to pollution
- Inspecting facilities to prevent pollution or adverse environmental impacts

The skill, the knowledge and the values reflected in this unit standard form part of the exit level outcomes required for the General Education and Training Certificate in Environmental Practice (NQF Level 1).

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING
It is assumed that a learner studying towards this qualification has attained ABET level 3 Mathematics and Communication.

UNIT STANDARD RANGE
The scope and level of this unit standard is indicated by range statements related to the specific outcomes. This unit standard includes the performance of a range of activities specific to my context which are associated with the use of the tools and equipment.

The amount of detail and degree of complexity provided in responses to questions and in explanations and descriptions should be appropriate to NQF Level 1.

**Specific Outcomes and Assessment Criteria:**

**SPECIFIC OUTCOME 1**
Select the appropriate hand tools and equipment for a variety of tasks.

OUTCOME RANGE
Tools and equipment includes: hand tools or implements, hand operated power tools, brooms, scoops, saws, rakes, pruning shears, picks, shovels, hoes, spades, sprayers, cutting and fastening tools, testing and sampling equipment, bins, bags, containers, spill bags, gabions, pipe connectors, safety and personal protective equipment, etc.

The number and range of tools and equipment will be determined by the context.

**ASSESSMENT CRITERIA**

**ASSESSMENT CRITERION 1**
The selection of tools and equipment is appropriate for the particular tasks to be performed.

**ASSESSMENT CRITERION RANGE**
Where there is a choice, the tool or piece of equipment selected should be the most environmentally responsible option.

**ASSESSMENT CRITERION 2**
Questions about the choice of the particular tool or piece of equipment are responded to appropriately.

**ASSESSMENT CRITERION 3**
Questions about the consequences of using the wrong tool or piece of equipment for the purpose are responded to appropriately.

**SPECIFIC OUTCOME 2**
Inspect and prepare tools and equipment prior to use.

OUTCOME RANGE
Inspection includes checking for damage to the tools and equipment; checking the safety aspects; considering the environmental impact of the tools and equipment.

Preparation of tools and equipment may include installing blades and bits, lubricating moving parts, making minor adjustments, sharpening.

**ASSESSMENT CRITERIA**

**ASSESSMENT CRITERION 1**
Inspection and preparation is performed according to worksite procedures.

**ASSESSMENT CRITERION RANGE**
According to worksite procedures: learners who are not in formal employment would meet an equivalent standard.

**ASSESSMENT CRITERION 2**
Questions about the consequences of not preparing tools and equipment correctly for use or for storage are responded to appropriately.

**ASSESSMENT CRITERION 3**
Questions about the potential impact of the tools and equipment on the environment are responded to appropriately.
**SPECIFIC OUTCOME 3**
Use hand tools or equipment to perform a variety of tasks.

**OUTCOME RANGE**
Use includes appropriate handling, ie correct holding of tools and equipment while working and correct placement of tools on work surface while not actually in use.

**ASSESSMENT CRITERIA**

**ASSESSMENT CRITERION 1**
A variety of tasks involving a range of hand tools and equipment is completed in accordance with requirements and in an environmentally responsible manner.

**ASSESSMENT CRITERION 2**
The tasks are performed to the correct quality standards.

**ASSESSMENT CRITERION 3**
Appropriate safety procedures are followed.

**SPECIFIC OUTCOME 4**
Maintain, care for and store tools and equipment in an environmentally responsible manner.

**OUTCOME RANGE**
Maintain means performing simple operations such as cleaning, lubricating, unblocking nozzles, replacing blades and bits, sharpening blunt tools, checking water and oil levels, replacing worn or damaged cables and plugs, tightening bolts, making simple adjustments and preventing rust.

**ASSESSMENT CRITERIA**

**ASSESSMENT CRITERION 1**
Unsafe or damaged tools and equipment, or tools and equipment which may impact adversely on the environment, are identified, reported and their use discontinued.

**ASSESSMENT CRITERION 2**
Simple repairs, maintenance and care tasks are carried out according to worksite procedures and in an environmentally responsible manner.

**ASSESSMENT CRITERION RANGE**
According to worksite procedures: learners who are not in formal employment would meet an equivalent standard.

**ASSESSMENT CRITERION 3**
Tools and equipment are appropriately stored in an environmentally responsible manner.

**SPECIFIC OUTCOME 5**
Work safely with due care for self, others, tools and equipment, materials and the environment.

**ASSESSMENT CRITERIA**

**ASSESSMENT CRITERION 1**
No injuries or damage to the environment results from the inappropriate use of the tools or equipment.

**ASSESSMENT CRITERION 2**
Tools and equipment are not misused.

**ASSESSMENT CRITERION 3**
Questions about safety procedures and the use of personal protective equipment are responded to appropriately.

**ASSESSMENT CRITERION 4**
Questions about the consequences of incorrect handling, use and storage of tools and equipment are responded to appropriately.
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 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 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 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 respond to questions about the 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 and functions of:
- Tools and equipment
- Attachments (where applicable), storage areas / facilities
- Personal protective equipment
- Environmental impacts

Purpose of:
- Tools and equipment
- Caring for tools and equipment
- Task-related procedures
- Health and safety procedures
- Personal protective equipment
- Caring for the environment

Attributes, descriptions, characteristics and properties:
- Tools and equipment
- Commonly used materials
- The functioning of the equipment

Processes and events:
- Cleaning, preparation and storage of tools and equipment
- Maintenance of tools and equipment

Causes and effects, implications of:
- Selecting the incorrect tool or equipment for the purpose or the material
- Holding or using the tool or equipment incorrectly
- Incorrect preparation, handling and storage
- Potential impact on the environment of use or misuse of tools and equipment
- Potential of the impact of environmental practices on the reputation of the enterprise

Procedures and techniques:
- For reporting worn or damaged tools
- Safety procedures
- Preparation, handling, use and storage of tools and equipment
- Installation and removal of blades, bits, etc
- Maintenance

Sensory cues:
- Visual cues, smell, sound, taste and touch associated with incorrect settings, blunt blades, loose bolts, etc

Regulations, legislation, agreements, policies, standards:
• Sections applicable to safety, health and the environment

Theory: rules, principles, laws:
• Related to the use of the tools and equipment
• Basic understanding of leverage, force, pressure, torque
• Related to the environmental impact of specific actions

Categories:
• Tools and equipment

Relationships, systems:
• Relationship between the nature of the tool and the purpose for which it is used and responsibility and obligations to the environment.

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 use of the tools and equipment.

UNIT STANDARD CCFO WORKING
Work effectively with others
• Work safely, without endangering the health and safety of others.

UNIT STANDARD CCFO ORGANISING
Organise and manage myself and my activities
• Inspect and prepare tools and equipment before use.
• Use, clean, maintain, care for and store tools and equipment correctly.

UNIT STANDARD CCFO COLLECTING
Collect, analyse, organise and critically evaluate information
• Use sensory information to assess the condition of tools and equipment.

UNIT STANDARD CCFO COMMUNICATING
Communicate effectively
• Report unsafe or damaged tools and equipment.

UNIT STANDARD CCFO SCIENCE
Use science and technology effectively and critically
• Apply basic understanding of leverage, force, pressure and torque in order to use tools and equipment effectively.

UNIT STANDARD CCFO DEMONSTRATING
Demonstrate an understanding of the world as a set of related systems
• Recognise the interrelationships between the nature of the tool, the purpose for which it is used and the individual’s responsibility and obligations towards the environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD:

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<tr>
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<tr>
<td>Core</td>
<td>General Education and Training Certificate: Environmental Practice</td>
<td>Level 1</td>
<td>NQF Level 01</td>
<td>Reregistered</td>
<td>2012-06-30</td>
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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. Interwaste (Pty)Ltd

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