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

Establish a plan for the monitoring, safe use and maintenance of equipment implements, technology and infrastructure

SAQA US ID	UNIT STANDARD TITLE			
116290	Establish a plan for the monitoring, safe use and maintenance of equipment implements, technology and infrastructure			
ORIGINATOR		ORIGINATING PROVIDER		
SGB Primary Agriculture				
QUALITY ASSURING BODY				
-				
FIELD			SUBFIELD	
Field 01 - Agriculture and Nature Conservation			Primary Agriculture	
ABET BAND	UNIT STANDARD TYPE	OLD NQF LEVEL	NEW NQF LEVEL	CREDITS
Undefined	Regular	Level 4	NQF Level 04	3
REGISTRATION STATUS		REGISTRATION START DATE	REGISTRATION END DATE	SAQA DECISION NUMBER
Reregistered		2009-07-01	2012-06-30	SAQA 0480/09
LAST DATE FOR ENROLMENT		LAST DATE FOR ACHIEVEMENT		
2013-06-30		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

A learner achieving this unit standard will be able to design, prepare and implement basic operational procedures for the cleaning, storage and proper maintenance of equipment, implements and infrastructure. The learner will also be able to monitor the safe use of equipment, technology, infrastructure and implements.

In addition learners will be well positioned to extend their learning and practice into other areas of agriculture, or to strive towards professional standards and practices at higher levels.

Competent learners will be fully conversant with agricultural regulations and aspects of safety as to

provide the environment for the application of quality practices and thus strengthen agricultural practices in general.

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

It is assumed that a learner attempting this unit standard will show competence against the following unit standards or equivalent:

- NQF 3: Apply routine maintenance and servicing plans and procedures.
- NQF 2: Define and understand production systems and production management.

UNIT STANDARD RANGE

Range statements are neither comprehensive nor necessarily appropriate to all contexts. Alternatives must however be comparable in scope and complexity. These are only as a general guide to scope and complexity of what is required.

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Develop a basic task related work program related to the scheduling and allocation of equipment and implements.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

The information required to develop a task-related work plan is identified and collected.

ASSESSMENT CRITERION 2

Equipment and implements are identified and allocated efficiently.

ASSESSMENT CRITERION 3

The skill needs of the work team are identified.

ASSESSMENT CRITERION 4

A task-related work plan is developed.

SPECIFIC OUTCOME 2

Prepare and implement basic operational procedures for the cleaning, storage and proper maintenance of equipment, implements and infrastructure.

OUTCOME RANGE

Maintenance of equipment, implements and infrastructure includes, but is not limited to the draining and replacing oil in a tractor, adjusting fan belts, checking tyre pressure of trucks, adjusting a plough angle, and adjusting the hydraulic lift on tractor.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

Maintenance procedures are modified, prepared and implemented.

ASSESSMENT CRITERION 2

Major servicing of equipment is performed.

ASSESSMENT CRITERION 3

Equipment not functioning efficiently is adapted.

ASSESSMENT CRITERION RANGE

Equipment refers to any of those that are used in the agricultural sector to perform functions that include, but are not limited to, fertiliser distribution, shearing, water distribution, sprayers, vehicles, and tractors.

Fertilizer distribution faulty, mechanized shearing tool jaggging, water distribution wrong, cutting / digging tools blunt, pressure drop because of blocked pipe, blocked nozzles in spraying boom, etc.

ASSESSMENT CRITERION 4

Re-calibration of appropriate equipment is performed or requested.

ASSESSMENT CRITERION RANGE

Fertilizer spreader, oil and re-adjust shearing tool, adjust water pressure / irrigation pipe distances, sharpen tools, unblock pipes, clean nozzles, etc.

ASSESSMENT CRITERION 5

Safety elements of equipment / tool / technology is adjusted i.e. safety shields.

SPECIFIC OUTCOME 3

Recognise, identify and solve problems related to the use of implements and equipment in an agricultural environment.

OUTCOME RANGE

Problem indicators may refer to any unusual occurrence, to possible cause of a problem and steps to resolving the problem.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

The possible causes of the problem encountered during task execution are identified.

ASSESSMENT CRITERION 2

Steps to be taken to rectify problems encountered are planned and organised.

ASSESSMENT CRITERION 3

The consequences of not resolving an encountered problem are explained.

ASSESSMENT CRITERION RANGE

Consequences could be anything from 'Animal could die', to 'Task not completed on time', 'Staff / workers endangered', or 'Environmental damage could occur.

ASSESSMENT CRITERION 4

Alternative methods and contingency plans are identified and implemented.

ASSESSMENT CRITERION 5

Problems that cannot be resolved are identified and reported timeously.

SPECIFIC OUTCOME 4

Draw up plans to ensure that safety regulations are implemented as prescribed for the use of implements, agro-chemicals and equipment.

OUTCOME RANGE

The plan should be based on the accident prevention policy of the organisation, and basic safety precautions as outlined in the National Occupation Safety Act, to prevent fires, accidents, chemical spills and injury.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

The implementation of the NOSA Act is explained.

ASSESSMENT CRITERION 2

The necessary safety procedures in the handling of fuel, agro-chemicals, equipment and implements are identified and implemented.

ASSESSMENT CRITERION 3

The procedures for the safe use and operation of implements and equipment are communicated to others.

SPECIFIC OUTCOME 5

Adapt equipment, implements and technology to suit different agricultural situations and processes.

OUTCOME RANGE

The function and use of equipment, implements and technology can be applied differently in different circumstances, depending on the context.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

The required task or function is identified and explained.

ASSESSMENT CRITERION 2

The correct equipment, implement or technological application that could fulfil the function is identified.

ASSESSMENT CRITERION 3

The equipment and/or implements are adjusted or adapted to fulfil the required function.

UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS

The assessment of qualifying learners against this standard should meet the requirements of established assessment principles.

It will be necessary to develop assessment activities and tools, which are appropriate to the contexts in which the qualifying learners are working. These activities and tools may include an appropriate combination of self-assessment and peer assessment, formative and summative assessment, portfolios and observations etc.

The assessment should ensure that all the specific outcomes, critical cross-field outcomes and essential embedded knowledge are assessed.

The specific outcomes must be assessed through observation of performance. Supporting evidence should be used to prove competence of specific outcomes only when they are not clearly seen in the actual performance.

Essential embedded knowledge must be assessed in its own right, through oral or written evidence and cannot be assessed only by being observed.

The specific outcomes and essential embedded knowledge must be assessed in relation to each other. If a qualifying learner is able to explain the essential embedded knowledge but is unable to perform the specific outcomes, they should not be assessed as competent. Similarly, if a qualifying learner is able to perform the specific outcomes but is unable to explain or justify their performance in terms of the essential embedded knowledge, then they should not be assessed as competent.

Evidence of the specified critical cross-field outcomes should be found both in performance and in the essential embedded knowledge.

Performance of specific outcomes must actively affirm target groups of qualifying learners, not unfairly discriminate against them. Qualifying learners should be able to justify their performance in terms of these values.

- Anyone assessing a learner against this unit standard must be registered as an assessor with the relevant ETQA.
- Any institution offering learning that will enable achievement of this unit standard or assessing this unit standard must be accredited as a provider with the relevant ETQA.
- Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines in the relevant qualification and the agreed ETQA procedures.

UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE

The person is able to demonstrate a basic knowledge of:

- Basic scheduling and work flow.
- Operational procedures.
- The safe handling of tools and equipment.
- The NOHSA Act and how it applies in the agricultural sector.
- The principles of safety precautions.
- Determining damaged and faulty equipment.
- The use and adaptation of tools, equipment and machinery in different combinations.
- Teamwork and communication.
- Work program development.
- Identification and resolving problems related to a work program.
- The benefits of a well prepared work plan.
- Personnel management.

UNIT STANDARD DEVELOPMENTAL OUTCOME

N/A

UNIT STANDARD LINKAGES

N/A

Critical Cross-field Outcomes (CCFO):

UNIT STANDARD CCFO IDENTIFYING

Problem solving relates to all specific outcomes.

UNIT STANDARD CCFO WORKING

Teamwork relates to all specific outcomes.

UNIT STANDARD CCFO ORGANISING

Self-organisation and management relates to specific outcomes:

- Develop a task related work program related to the scheduling and allocation of equipment and implements.

- Recognise, identify and solve problems related to the use of implements and equipment in an agricultural environment.
- Draw up plans to ensure that safety regulations are implemented as prescribed for the use of implements, agro-chemicals and equipment.
- Adapt equipment, implements and technology to suit different agricultural situations and processes.

UNIT STANDARD CCFO COLLECTING

Information evaluation relates to specific outcomes:

- Develop a task related work program related to the scheduling and allocation of equipment and implements.
- Prepare and implement basic operational procedures for the cleaning, storage and proper maintenance of equipment, implements and infrastructure.
- Draw up plans to ensure that safety regulations are implemented as prescribed for the use of implements, agro-chemicals and equipment.
- Adapt equipment, implements and technology to suit different agricultural situations and processes.

UNIT STANDARD CCFO COMMUNICATING

Communication relates to all specific outcomes.

UNIT STANDARD CCFO SCIENCE

Use science and technology relates to all specific outcomes.

UNIT STANDARD CCFO DEMONSTRATING

Inter-relatedness of systems relates to specific outcomes:

- Develop a task related work program related to the scheduling and allocation of equipment and implements.
- Recognise, identify and solve problems related to the use of implements and equipment in an agricultural environment.
- Draw up plans to ensure that safety regulations are implemented as prescribed for the use of implements, agro-chemicals and equipment.
- Adapt equipment, implements and technology to suit different agricultural situations and processes.

UNIT STANDARD CCFO CONTRIBUTING

Self-development relates to specific outcomes:

- Develop a task related work program related to the scheduling and allocation of equipment and implements.
- Draw up plans to ensure that safety regulations are implemented as prescribed for the use of implements, agro-chemicals and equipment.
- Adapt equipment, implements and technology to suit different agricultural situations and processes.

QUALIFICATIONS UTILISING THIS UNIT STANDARD:

	ID	QUALIFICATION TITLE	OLD LEVEL	NEW LEVEL	STATUS	END DATE	QUALITY ASSURING BODY
Core	48979	National Certificate: Animal Production	Level 4	New Level Assignment Pend.	Reregistered	2012-06-30	AgriSETA
Core	49009	National Certificate: Plant Production	Level 4	New Level Assignment Pend.	Reregistered	2012-06-30	AgriSETA

PROVIDERS CURRENTLY ACCREDITED TO OFFER THIS UNIT STANDARD: