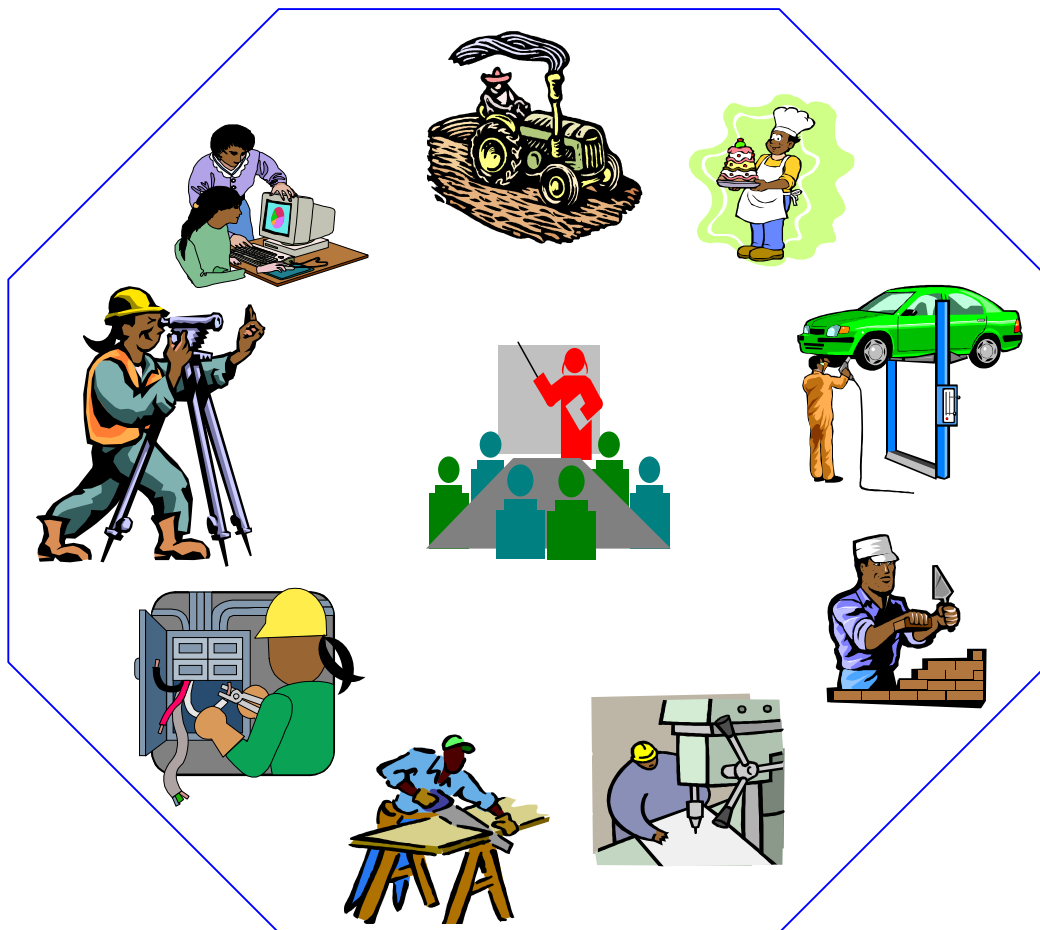




Federal Democratic Republic of Ethiopia
OCCUPATIONAL STANDARD

FARM MACHINERY AND EQUIPMENT OPERATION

NTQF Level II, III, IV and V



*Ministry of Education
July 2014*

Introduction

Ethiopia has embarked on a process of reforming its TVET-System. Within the policies and strategies of the Ethiopian Government, technology transformation – by using international standards and international best practices as the basis, and, adopting, adapting and verifying them in the Ethiopian context – is a pivotal element. TVET is given an important role with regard to technology transfer. The new paradigm in the outcome-based TVET system is the orientation at the current and anticipated future demand of the economy and the labour market.

The Ethiopia Occupational Standards (EOS) is the core element of the Ethiopian National TVET-Strategy and an important factor within the context of the National TVET-Qualification Framework (NTQF). They are national Ethiopian standards, which define the occupational requirements and expected outcome related to a specific occupation without taking TVET delivery into account.

This document details the mandatory format, sequencing, wording and layout for the Ethiopia Occupational Standard which comprised of Units of Competence.

A Unit of Competence describes a distinct work activity. It is documented in a standard format that comprises:

- Occupational title and NTQF level
- Unit title
- Unit code
- Unit descriptor
- Elements and Performance criteria
- Variables and Range statement
- Evidence guide

Together all the parts of a Unit of Competence guide the assessor in determining whether the candidate is competent.

The ensuing sections of this EOS document comprise a description of the occupation with all the key components of a Unit of Competence:

- chart with an overview of all Units of Competence for the respective level including the Unit Codes and the Unit Titles
- contents of each Unit of Competence (competence standard)
- occupational map providing the Technical and Vocational Education and Training (TVET) providers with information and important requirements to consider when designing training programs for this standards and for the individual, a career path

UNIT OF COMPETENCE CHART

Occupational Standard: Farm Machinery and Equipment Operation		
Occupational Code: AGR FME		
NTQF Level II		
<p>AGR FME2 01 0714 Apply Safe Working Practices</p>	<p>AGR FME2 02 0714 Use and Maintain Workplace Tools and Equipment</p>	<p>AGR FME2 03 0714 Undertake Operational Maintenance of Machinery and Implements</p>
<p>AGR FME2 04 0714 Inspect and Service Steering Systems</p>	<p>AGR FME2 05 0714 Test and Repair Low Voltage Wiring/Lighting Systems</p>	<p>AGR FME2 06 0714 Operate Basic Machinery and Equipment</p>
<p>AGR FME2 07 0714 Drive Tractor without Attachments</p>	<p>AGR FME2 08 0714 Operate Tractor with Tillage Implements</p>	<p>AGR FME2 09 0714 Operate Tractor with Trailer</p>
<p>AGR FME2 10 0714 Operate Cane Haulage Tractor</p>	<p>AGR FME2 11 0714 Conduct Front-end Loader Operations</p>	<p>AGR FME2 12 0714 Repair and Fit Tyres and Tubes</p>
<p>AGR FME2 13 0714 Participate in Environmentally Sustainable Work Practices</p>	<p>AGR FME2 14 0714 Participate in Workplace Communication</p>	<p>AGR FME2 15 0714 Work in Team Environment</p>
<p>AGR FME2 16 0714 Develop Business Practice</p>	<p>AGR FME2 17 0714 Standardize and Sustain 3S</p>	

NTQF Level III

<u>AGR FME3 01 0714</u> Operate Machinery and Equipment	<u>AGR FME3 02 0714</u> Operate Specialised Machinery and Equipment	<u>AGR FME3 03 0714</u> Undertake Preparation of Land for Agricultural Crop Production
<u>AGR FME3 04 0714</u> Operate Broadcast Sowing Machinery and Equipment	<u>AGR FME3 05 0714</u> Operate Row Crop Planting and Seeding Machinery and Equipment	<u>AGR FME3 06 0714</u> Undertake Agricultural Crop Harvesting Activities
<u>AGR FME3 07 0714</u> Operate Broadcast and Row Crop Harvest Machinery and	<u>AGR FME3 08 0714</u> Operate Cane Harvester	<u>AGR FME3 09 0714</u> Operate Chemical Application Machinery and Equipment
<u>AGR FME3 10 0714</u> Operate Precision Control Technology	<u>AGR FME3 11 0714</u> Operate Mobile Irrigation Machinery and Equipment	<u>AGR FME3 12 0714</u> Operate Land-forming Machinery and Equipment
<u>AGR FME3 13 0714</u> Ground Spread Fertiliser and Soil Ameliorant	<u>AGR FME3 14 0714</u> Operate Compost Processing Plant, Machinery and Equipment	<u>AGR FME3 15 0714</u> Conduct Backhoe/Loader Operations
<u>AGR FME3 16 0714</u> Perform Machinery Maintenance	<u>AGR FME3 17 0714</u> Coordinate Machinery and Equipment Maintenance and Repair	<u>AGR FME3 18 0714</u> Transport Machinery
<u>AGR FME3 19 0714</u> Implement and Monitor Environmentally Sustainable Work Practices	<u>AGR FME3 20 0714</u> Apply First Aid	<u>AGR FME3 21 0714</u> Monitor Implementation of Work Plan/Activities
<u>AGR FME3 22 0714</u> Apply Quality Control	<u>AGR FME3 23 0714</u> Lead Workplace Communication	<u>AGR FME3 24 0714</u> Lead Small Teams
<u>AGR FME3 25 0714</u> Improve Business Practice	<u>AGR FME3 26 0714</u> Prevent and Eliminate MUDA	

NTQF Level IV**AGR FME4 01 0714**

Implement Operational Plan

AGR FME4 02 0714

Perform Calibration Checks on Equipment

AGR FME4 03 0714

Identify Risk and Apply Risk Management Processes

AGR FME4 04 0714

Supervise Agricultural Crop Establishment

AGR FME4 05 0714

Supervise Agricultural Crop Harvesting

AGR FME4 06 0714

Coordinate Customer Service and Networking Activities

AGR FME4 07 0714

Supervise Work Routines and Staff Performance

AGR FME4 08 0714

Analyse and Interpret Production Data

AGR FME4 09 0714

Implement Workplace Information System

AGR FME4 10 0714

Provide Advice and Sell Machinery and Equipment

AGR FME4 11 0714

Maintain Occupational Health and Safety (OHS) Processes

AGR FME4 12 0714

Plan and Organize Work

AGR FME4 13 0714

Migrate to New Technology

AGR FME4 14 0714

Establish Quality Standards

AGR FME4 15 0714

Develop Individuals and Team

AGR FME4 16 0714

Utilize Specialized Communication Skills

AGR FME4 17 0714

Manage and Maintain Small/Medium Business Operations

AGR FME4 18 0714

Apply Problem Solving Techniques and Tools

NTQF Level V**AGR FME5 01 0714**

Manage Occupational Health and Safety (OHS) Processes

AGR FME5 02 0714

Manage Machinery and Equipment

AGR FME5 03 0714

Implement a Machinery Management System

AGR FME5 04 0714

Plan and Manage Infrastructure Requirements

AGR FME5 05 0714

Plan and Monitor Operation Processes

AGR FME5 06 0714

Collect and Manage Data

AGR FME5 07 0714

Develop a Whole Farm Machinery Plan

AGR FME5 08 0714

Prepare Reports

AGR FME5 09 0714

Implement and Monitor Farm Transport Operation

AGR FME5 10 0714

Prepare and Monitor Budgets and Financial Reports

AGR FME5 11 0714

Monitor and Review Business Performance

AGR FME5 12 0714

Prepare Estimates, Quotes and Tenders

AGR FME5 13 0714

Negotiate and Monitor Contracts

AGR FME5 14 0714

Manage Project Quality

AGR FME5 15 0714

Facilitate and Capitalize on Change and Innovation

AGR FME5 16 0714

Establish and Conduct Business Relationships

AGR FME5 17 0714

Manage Continuous Improvement Process (Kaizen)

NTQF Level II

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Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Apply Safe Working Practices
Unit Code	AGR FME2 01 0714
Unit Descriptor	This unit of competency encompasses competencies necessary to apply basic safety and emergency procedures to maintain a safe workplace for staff, customers and others.

Elements	Performance Criteria
1. Apply basic safety procedures	<p>1.1 Workplace information requirements and procedures are accessed and strictly followed.</p> <p>1.2 Procedures are followed and maintained to achieve a safe working environment in line with Occupational Health and Safety (OHS) regulations and requirements and according to worksite policy.</p> <p>1.3 All unsafe situations are recognised and reported according to worksite policy.</p> <p>1.4 All breakdowns in relation to machinery and equipment are reported to supervisor or nominated persons.</p> <p>1.5 Fire and safety hazards are identified and precautions taken or reported according to worksite policy and procedures.</p> <p>1.6 Dangerous goods and substances are identified, handled and stored according to enterprise policy and procedures and OHS requirements.</p> <p>1.7 Worksite policy regarding manual handling practice is followed.</p> <p>1.8 Participation in consultative arrangements established by company for OHS is exercised.</p>
2. Apply emergency procedures	<p>2.1 Enterprise policies and procedures regarding illness or accidents are identified and applied.</p> <p>2.2 Safety alarms are identified.</p> <p>2.3 Qualified persons are contacted in the event of accident or sickness of customers or staff and accident details are documented and communicated according to worksite accident/ injury procedures.</p> <p>2.4 Worksite evacuation procedures are identified and applied.</p>

Variable	Range
Information	<p>may include:</p> <ul style="list-style-type: none"> worksite documentation for OHS, general duty of care, emergency procedures, safe working practices, enterprise operating procedures, customer requirements and industry/workplace codes of practice
Occupational Health and Safety (OHS) regulations	<p>may include:</p> <ul style="list-style-type: none"> safe manual handling and lifting, customers, staff, equipment/ tooling, premises and stock

Hazards	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • Stumps and logs in the soil or covered by debris • Torn or improper use personal protective equipments • Worn out repair tools • Servicing while engine is running • Working under machines not secured • unprotected moveable parts • electricity and water, • toxic substances, • damaged packing material or containers, • broken or damaged Equipment, • flammable materials and fire hazards, • lifting practices, • spillages, waste and debris especially on floors
Enterprise policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • hazard policies and procedures, emergency, fire and accident procedures, personal safety procedures, procedures for the use of personal protective clothing and equipment, use of motor vehicles, resolution procedures, job procedures and work instructions • sickness, accidents, fire or store evacuation involving staff or customers
Communicating	<p>may be:</p> <ul style="list-style-type: none"> • verbal, written, by telephone or by other means

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence of:</p> <ul style="list-style-type: none"> • communicating effectively with others involved in or affected by the work • identifying and assessing hazardous situations and rectifying, or reporting to the relevant persons • operating fire-fighting appliances • safely handling and storage of dangerous and/or hazardous goods and substances • applying safe manual handling practices • safely and effectively operating equipment and utilising materials over the full range of functions and processes for work undertaken on worksite • following worksite evacuation procedures
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • common farm machinery terminology • OHS regulations/requirements, • equipment, • material and personal safety requirements • safe manual handling theories and practices • the selection and application of fire fighting appliances • dangerous goods and hazardous chemicals handling processes • worksite reporting procedures

	<ul style="list-style-type: none"> the implications of OHS on efficiency, morale and customer relations
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> collect, organise and understand information related to recognising and reporting situations communicate ideas and information to reporting procedures (verbal and written) plan and organise activities which implement and follow standard procedures work with others and in a team by assisting and cooperating with team members use mathematical ideas and techniques to document and report numbers for emergency procedures establish diagnostic processes which recommend improvements for OHS issues use workplace technology related to the use of technology to assist with safe work practices
Resources Implication	<p>The following should be made available:</p> <ul style="list-style-type: none"> a workplace or simulated workplace situations requiring safe working practices worksite or equivalent instructions on safe working practice hazardous chemicals and/or dangerous goods information materials, tooling and equipment fire fighting appliances and fire test facilities
Methods of Assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> Interview / Written Test Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competency may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Farm Machinery and Equipment Operations Level II	
Unit Title	Use and Maintain Workplace Tools and Equipment
Unit Code	AGR FME2 02 0714
Unit Descriptor	This unit covers the competence required to select, safely use and maintain workplace tooling and equipment. The unit includes identification and confirmation of work requirement, preparation for work, selection, use, servicing, maintenance and storage of tooling and equipment and completion of work finalisation processes, including clean-up and documentation.

Elements	Performance Criteria
1. Select correct tooling and equipment for workplace application	<p>1.1 Workplace information requirements and procedures are accessed and strictly followed.</p> <p>1.2 Tooling and equipment are selected to meet job requirements.</p> <p>1.3 Suitable tooling and equipment are selected for use within the workplace environment.</p> <p>1.4 Tooling and equipment are selected according to enterprise procedures/policies.</p>
2. Use of tooling and equipment	<p>2.1 Safe operating procedures are observed and noted during the use of tools/ equipment in accordance with workplace guidelines.</p> <p>2.2 Tooling and equipment are used in a safe manner to prevent injury to self and others.</p> <p>2.3 Tooling and equipment are used in a manner that does not cause damage to other workplace equipment.</p> <p>2.4 Observations are noted during the use of tooling/ equipment.</p> <p>2.5 Emergency procedures are identified and followed as per organization's guideline.</p>
3. Service and maintain workplace tooling and equipment	<p>3.1 Tooling and equipment are regularly checked against manufacturer/component supplier recommendations to ensure safe operating condition.</p> <p>3.2 Damaged/worn tooling and equipment are tagged and removed from the workplace for repair or replacement and reported in accordance with enterprise requirements.</p> <p>3.3 Tooling/equipment are serviced, adjusted and/or maintained as per manufacturer/component supplier schedule to ensure safe and correct operation, within the scope of responsibility.</p> <p>3.4 Maintenance method options are analysed and those most appropriate to the circumstances are selected and prepared as per organisational policies and procedures.</p> <p>3.5 Environmental requirements are observed and precautions implemented according to workplace and environmental protection regulation or guidelines.</p>

	3.6 Servicing and <i>maintenance operations</i> are carried out according to industry regulations/guidelines, <i>OHS legislation</i> and enterprise procedures/policies.
4. Store and secure tooling and equipment	4.1 Tooling and equipment are cleaned, checked and stored. 4.2 Tooling and equipment are securely stored. 4.3 Documents are completed and <i>communicated</i> according to enterprise policies and procedures.

Variable	Range
Workplace information	may include: <ul style="list-style-type: none"> • verbal or written and graphical instructions, • signage, work schedules/plans/specifications, • work bulletins, memos, material safety data sheets, diagrams or sketches • safe work procedures related to the use and maintenance of workplace tooling and equipment • regulatory/legislative requirements pertaining to the automotive industry • engineer's design specifications and instructions • organisation work specifications and requirements • instructions issued by authorised enterprise or external persons
Tooling and equipment	May include: <ul style="list-style-type: none"> • calculators • hand and power tooling • tooling for removal/adjustment, storage racks • protective covers • measuring devices • plastics repair equipment, • sealing equipment, adhesive equipment • heating equipment • templates • machinery cleaning equipment • operator manuals
Safe operating procedures	are to include but are not limited to the conduct of operational risk assessment and treatments associated with : <ul style="list-style-type: none"> • vehicular movement • toxic substances • electrical safety • machinery movement and operation • manual and mechanical lifting and shifting • working in proximity to others and site visitors
Emergency procedures	Are to include but are not limited to: <ul style="list-style-type: none"> • emergency shutdown and stopping of equipment, • extinguishing fires, • enterprise first aid requirements and site evacuation

Maintenance method	are to include: <ul style="list-style-type: none"> • isolation of fault(s) • dismantling • inspection and evaluation • replacement of components parts • assembly and completion of operational tests and records
Organisational policies and procedures	May include: <ul style="list-style-type: none"> • quality policies and procedures, including Relevant Ethiopian standards • OHS, and environment requirement • manufacturer specifications and industry codes of practice • safe work , reporting and recording procedures
Environmental requirements	Are to include but are not limited to: <ul style="list-style-type: none"> • waste management, • noise, dust and clean-up management
Maintenance operations	may include: <ul style="list-style-type: none"> • routine maintenance to tooling and equipment as per schedules, • labelling faulty tooling and equipment, • minor repairs to tooling and equipment, and the chocking, • jacking and supporting of machines on level and incline planes
OHS legislation	may include: <ul style="list-style-type: none"> • protective clothing and equipment, • use of tooling and equipment, • workplace environment and safety, • handling of material, • use of fire fighting equipment, • enterprise first aid, • hazard control and hazardous materials and substances
Communicating	are to include, but are not limited to: <ul style="list-style-type: none"> • verbal and visual instructions and fault reporting and may include site specific instructions, written instructions, plans or instructions related to job/task, telephones and pagers

Evidence Guide

Critical Aspects of Competence	Demonstrate knowledge and skills of: <ul style="list-style-type: none"> • selection and safe use of hand tooling and workplace equipment • basic maintenance of tooling and equipment within the scope of operator responsibility • selection and safe use of personal protective equipment
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • OHS regulations/requirements, equipment, material and personal safety requirements • tool and equipment selection procedures • basic maintenance procedures for tooling and equipment • tool and equipment safety and operating procedures • types, characteristics, uses and limitations of hand tooling , power tooling and workplace equipment

	<ul style="list-style-type: none"> • work organisation and planning processes • enterprise quality processes
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • apply workplace policies and procedures • apply identification of technical information • apply planning and organising skills to own work activities, including making good use of time and resources, sorting out priorities and monitoring one's own performance • interact effectively with other persons both on a one-to-one basis and in groups, including understanding and responding to the needs of a customer and working effectively as a member of a team to achieve a shared goal • establish safe and effective work processes which anticipate and/or resolve problems and downtime, to systematically develop solutions to avoid or minimise reworking and avoid wastage • use mathematical ideas and techniques to correctly calculate time, assess tolerances, apply accurate measurements, calculate material requirements and establish quality checks • use workplace technology related to the use and maintenance of workplace tooling and equipment, including the use of measuring equipment, and communication devices and the reporting/documenting of results
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competency may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operations Level II	
Unit Title	Undertake Operational Maintenance of Machinery and Implements
Unit Code	AGR FME2 03 0714
Unit Descriptor	This unit covers the process of undertaking operational maintenance of machinery and defines the standard required to: select and prepare tools and equipment; check machinery and equipment to identify faults; carry out lubrication and basic servicing; carry out basic repairs; report simple faults or report and tag more serious faults; collect, remove and recycle or dispose of wastes; maintain/complete work records of machinery maintenance and cleanup work area. This unit applies to workers in the agriculture, horticulture and land management sectors who use non-specialist skills to perform basic servicing and repairs on a range of machinery according to scheduled maintenance programs. The operational maintenance of machinery will usually follow set routines, methods and procedures.

Elements	Performance Criteria
1. Prepare for maintenance	<p>1.1 Maintenance plans are accessed and understood prior to undertaking maintenance work.</p> <p>1.2 Routine pre-operational checks of machinery and equipment are carried out and adjustments made according to manufacturer's specifications and/or enterprise procedures.</p> <p>1.3 Faulty or unsafe machinery and equipment are identified and segregated for repair or replacement according to enterprise requirements.</p> <p>1.4 Tools are inspected for serviceability and prepared for use according to manufacturer's specifications and enterprise requirements.</p> <p>1.5 Occupational Health and Safety (OHS) hazards are identified and safety concerns reported to the supervisor.</p>
2. Perform scheduled maintenance	<p>2.1 OHS hazards are identified and safety concerns reported to the supervisor.</p> <p>2.2 Greasing, lubrication and other basic servicing of machinery are carried out according to manufacturer's specifications and enterprise requirements.</p> <p>2.3 Operational maintenance of machinery and equipment is carried out pre- and on operation to extent permitted by manufacturer's specifications and enterprise requirements.</p> <p>2.4 Equipment is adjusted according to manufacturer's specifications and enterprise requirements.</p> <p>2.5 Basic techniques are applied and mechanical faults are identified and rectified according to manufacturer's specifications.</p>

	2.6 More serious or complex faults are reported for referral according to enterprise requirements.
3. Carry out basic routine maintenance	<p>3.1 Suitable Personal Protective Equipment is stored, selected, used and maintained according to OHS requirements.</p> <p>3.2 Greasing, lubrication and other basic servicing of machinery and equipment are carried out according to operator's manual/manufacturer's specifications and supervisor's instructions.</p> <p>3.3 Routine adjustments and repairs are made to machinery and equipment according to operator manual/manufacturer's specifications and supervisor's instructions.</p> <p>3.4 Work is conducted according to OHS requirements and completed to supervisor's satisfaction.</p>
4. Complete maintenance activities	<p>4.1 Tools are cleaned, returned to operating order and stored according to manufacturer's specifications, OHS and enterprise requirements.</p> <p>4.2 Environmental procedures/requirements are followed and waste from maintenance activities is collected, treated and disposed or recycled according to enterprise environmental requirements.</p> <p>4.3 Work areas are cleaned, returned to operating condition and maintained according to OHS and enterprise requirements.</p> <p>4.4 Malfunctions, faults, wear or damage to tools are reported to the supervisor according to enterprise requirements.</p> <p>4.5 Relevant information is documented according to industry and enterprise requirements.</p>

Variable	Range
Maintenance	May involve: <ul style="list-style-type: none"> • small engine machinery including hand tools , equipment, implements, trailers and farm machinery
Routine pre-operational maintenance of machinery	May include: <ul style="list-style-type: none"> • the basic operational maintenance of a range of agricultural, horticultural or land management machinery
Occupational Health and Safety (OHS) hazards	May include: <ul style="list-style-type: none"> • sharp cutting tooling and instruments • Torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running • working under machines not secured • unprotected moveable parts • electricity and water • toxic substances • damaged packing material or containers

	<ul style="list-style-type: none"> • broken or damaged equipment • flammable materials and fire hazards • lifting practices • spillages, waste and debris especially on floors
Machinery	<p>May include:</p> <ul style="list-style-type: none"> • sprayers, tractors, mechanical pruners, harvesters, turf mowers, rotary hoes, chainsaws, hedge trimmers • winches
Personal Protective Equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Environmental procedures/ requirements	<p>may include:</p> <ul style="list-style-type: none"> • waste management • pollution • dust and clean-up management

Evidence Guide

Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • select and prepare tools and equipment • check machinery and equipment to identify faults • carry out basic repairs • .carry out lubrication and basic servicing • report simple faults or report and tag more serious faults • collect, remove and recycle or dispose of wastes/ cleanup work area • maintain records of machinery maintenance(complete work records)
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • types, characteristics and functions of machinery and equipment • machinery and equipment checking and operating procedures • types, characteristics and functions of tools used in maintenance of machinery and equipment • types and uses of lubricants and other commonly used servicing materials • operational principles of machinery including mechanical and auto-electrical systems • servicing characteristics of plant and equipment • types, characteristics, uses and limitations of hand power tools • functions of components of common mechanical and hydraulic systems • working principles of 2-stroke, 4-stroke, and diesel engines • set-up requirements of plant and equipment, and principles of calibration • basic processes and techniques • environmental Codes of Practice with regard to maintenance activities and disposal of fuels and oils • OHS and environmental legislative and enterprise requirements and Codes of Practice

	<ul style="list-style-type: none"> • hazard identification and OHS procedures • Codes of Practice with regard to the use and control of hazardous substances and/or working in confined spaces
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify hazards and apply safe work practices • use tools and equipment safely • carry out basic servicing of machinery • carry out basic mechanical fault finding • refer complex mechanical faults to appropriate technician • follow procedures to dispose of waste • recognise caution or hazard signs and symbols • interpret tasks or information from labels, manuals or written instructions • record information accurately or verbally report information • use literacy skills to read and follow sequenced written instructions and record information accurately and legibly • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification and seeking advice from supervisor • measure and calculate volumes, consumption and lubrication requirements • use interpersonal skills to work with and relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities • demonstrate safe and environmentally responsible workplace practices • read and interpret manufacturers specifications, work and maintenance plans, safety decals and Material Safety Data Sheets (MSDSs)
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Inspect and Service Steering Systems
Unit Code	AGR FME2 04 0714
Unit Descriptor	This unit covers the competence required carry out the inspection and servicing of wheeled and tracked type steering systems and associated components in an automotive service and/or repair context. The unit includes identification and confirmation of work requirement, preparation for work, inspection and servicing of wheeled and tracked type steering systems and associated components and completion of work finalisation processes, including clean-up and documentation.

Elements	Performance Criteria
1. Prepare to undertake inspection and servicing of steering systems and related components	<p>1.1 Nature and scope of work requirements are identified and confirmed.</p> <p>1.2 Workplace information sources are accessed and procedures strictly adhered.</p> <p>1.3 OHS requirements including regulatory requirements and Personal Protective Equipment needs are observed throughout the work.</p> <p>1.4 Procedures and information such as workshop manuals and specifications and tooling required are sourced.</p> <p>1.5 Methods appropriate to the circumstances are selected and prepared in accordance with standard operating procedures.</p> <p>1.6 Resources required for inspecting and servicing steering systems are sourced and support equipment is identified and prepared.</p> <p>1.7 Warnings are observed in relation to working with wheeled and tracked vehicles.</p>
2. Conduct inspection and analyse results	<p>2.1 Inspection is implemented in accordance with workplace procedures and manufacturer/component supplier specifications.</p> <p>2.2 Results are compared with manufacturer/component supplier specifications to indicate compliance or non-compliance.</p> <p>2.3 Results are documented with evidence and supporting information and recommendation(s) made.</p> <p>2.4 Report is forwarded to persons for action in accordance with workplace procedures.</p>
3. Carry out servicing	<p>3.1 Relevant tools, equipment and materials requirements are identified and made ready for use prior to the start of work practice as per job specification and work place procedures.</p> <p>3.2 Servicing is implemented in accordance with workplace procedures and manufacturer/component supplier specifications.</p>

	<p>3.3 Safe operating procedures are observed and noted during the use of tools/ equipment in accordance with workplace guidelines.</p> <p>3.4 Adjustments including wheel bearing adjustments are made during the service in accordance with manufacturer/ component supplier specifications.</p> <p>3.5 Emergency procedures are identified and followed as per organization's guideline.</p>
4. Prepare machinery and equipment for operation and/or storage	<p>4.1 Service schedule documentation is completed in standard formats and communicated to appropriate body following organizational procedure.</p> <p>4.2 Final inspection is made to ensure protective guards, safety features and cowlings are in place.</p> <p>4.3 Final inspection is made to ensure work is to workplace expectations.</p> <p>4.4 Vehicle/equipment is cleaned for use or storage to workplace expectations.</p> <p>4.5 Job card is processed in accordance with workplace procedures.</p>

Variable	Range
Information	<p>may include:</p> <ul style="list-style-type: none"> • verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets, diagrams or sketches • safe work procedures related to the inspection and servicing of wheeled and tracked type steering systems and associated components • regulatory/legislative requirements pertaining to the automotive industry, • organisation work specifications and requirements • instructions issued by authorised enterprise or external persons
OHS requirements	<p>Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include:</p> <ul style="list-style-type: none"> ➤ protective clothing and equipment ➤ use of tooling and equipment ➤ workplace environment and safety ➤ handling of material ➤ use of fire fighting equipment ➤ enterprise first aid ➤ hazard control and ➤ hazardous materials and substances
Personal Protective Equipment	<p>may include:</p> <ul style="list-style-type: none"> • prescribed under legislation/regulations/codes of practice and workplace policies and practices

Methods	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • visual, aural and functional assessments, including damage, corrosion, wear and electrical
Steering systems	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • wheeled and tracked vehicles • light and heavy vehicles • motorcycles and outdoor power equipment
Tools and equipment	<p>May include:</p> <ul style="list-style-type: none"> • hand tooling, meters, gauges • hydraulic testing equipment and devices
Materials	<p>Materials may include:</p> <ul style="list-style-type: none"> • lubricants and cleaning materials
Safe operating procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • the conduct of operational risk assessment and treatments associated with vehicular movement, hazardous substances, electrical safety, machinery movement and operation, manual lifting and shifting, working in proximity to others and site visitors
Emergency procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • emergency shutdown and stopping of equipment • operating safely in the event of fires • enterprise first aid requirements and site evacuation
Communicating	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • verbal and visual instructions and fault reporting • site specific instructions • written instructions • plans or instructions related to job/task • telephones and pagers
System components	<p>May include:</p> <ul style="list-style-type: none"> • wheel bearings, ball joints • rose joints, struts, idler arms • steering boxes and columns • electronic controlled systems • two and four wheel steer and full hydraulic steering, including articulated vehicles and tracked type systems

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • observing safety procedures and requirements • communicating effectively with others involved in or affected by the work • selecting methods and techniques appropriate to the circumstances • completing preparatory activity in a systematic manner • conducting service of a range of steering systems in accordance with the workplace and manufacturer/component supplier requirements • accurately interpreting inspection results • servicing of steering systems completed within workplace timeframes

	<ul style="list-style-type: none"> • make vehicle ready for operation in compliance with workplace requirements
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • OHS and environmental regulations/requirements, equipment, material and personal safety requirements • dangers of working with wheeled and/or tracked vehicles • operating principles of mechanical and hydraulic steering systems and their relationship to each other • types and layout of service/repair manuals • inspection procedures • service procedures • enterprise quality procedures • work organisation and planning processes
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • apply research and interpretive skills sufficient to locate, interpret and apply manufacturer/component supplier procedures, workplace policies and procedures • apply analytical skills required for identification and analysis of technical information • apply questioning and active listening skills for example when obtaining information from customers • apply oral communication skills sufficient to convey information and concepts to customers • apply planning and organising skills to own work activities, including making good use of time and resources, sorting out priorities and monitoring one's own performance • interact effectively with other persons both on a one-to-one basis and in groups, including understanding and responding to the needs of a customer and working effectively as a member of a team to achieve a shared goal • establish safe and effective work processes which anticipate and/or resolve problems and downtime, to systematically develop solutions to avoid or minimise reworking and avoid wastage • use mathematical ideas and techniques to correctly calculate time, assess tolerances, apply accurate measurements, calculate material requirements and establish quality checks • use workplace technology related to the inspection and servicing of steering systems and associated components, including the use of electronic measuring equipment, computerised technology and communication devices and the reporting/documenting of results
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Test and Repair Low Voltage Wiring/Lighting Systems
Unit Code	AGR FME2 05 0714
Unit Descriptor	This unit covers the competence to carry out lighting installations, testing and repair to low voltage systems appropriate to machinery and trailers. The unit includes identification and confirmation of work requirement, preparation for work, installation, testing and repair of systems and completion of work finalisation processes, including clean-up and documentation.

Elements	Performance Criteria
1. Prepare for work	<p>1.1 Work instructions are used to determine job requirements, including method, processes and equipment.</p> <p>1.2 Job specifications are read and interpreted.</p> <p>1.3 OHS requirements including Personal Protective Equipment needs are observed throughout the work.</p> <p>1.4 Tooling, equipment and materials are identified and checked for safe and effective operation.</p> <p>1.5 Procedures are determined to minimise task time.</p>
2. Install wiring/lighting electrical systems	<p>2.1 Information is accessed from manufacturer/component supplier specifications and correctly interpreted.</p> <p>2.2 Components, tooling and equipment are identified, selected and prepared in accordance with manufacturer/component supplier instructions and site procedures.</p> <p>2.3 Wiring/lighting circuit plans and designs are followed and repair procedures completed in accordance with site procedures and manufacturer/component supplier specifications.</p> <p>2.4 Legislation, industry guidelines and enterprise policies/procedures are followed.</p> <p>2.5 Undue damage is avoided to equipment or machinery.</p>
3. Repair electrical systems	<p>3.1 Information is accessed for repairing electrical wiring/lighting from manufacturer/component supplier specifications and correctly interpreted.</p> <p>3.2 Components, tooling and equipment are identified, selected and prepared in accordance with manufacturer/ component supplier instructions and site procedures.</p> <p>3.3 Repair work is completed in accordance with site procedures.</p> <p>3.4 Workplace documents are completed in accordance with site requirements.</p>
4. Test electrical systems	<p>4.1 Information is accessed from manufacturer/component supplier specifications and correctly interpreted.</p>

	<p>4.2 All tests are carried out in accordance with manufacturer/ component supplier specifications and tolerances.</p> <p>4.3 Testing is completed without causing damage to component or system.</p> <p>4.4 Performance is recorded, documented and communicated to appropriate personnel.</p>
5. Clean up work area and maintain equipment	<p>5.1 Material that can be reused is collected and stored.</p> <p>5.2 Waste and scrap are removed following workplace procedure.</p> <p>5.3 Equipment and work area are cleaned and inspected for serviceable condition in accordance with workplace procedures.</p> <p>5.4 Unserviceable equipment is tagged and faults are identified in accordance with workplace requirements.</p> <p>5.5 Operator maintenance is completed in accordance with manufacturer/component supplier specifications and site procedures.</p> <p>5.6 Tooling and equipment are maintained in accordance with workplace procedures.</p>

Variable	Range
OHS requirements	<p>are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> • protective clothing and equipment • use of tooling and equipment • workplace environment and safety • handling of material • use of fire fighting equipment • enterprise first aid • hazard control and hazardous materials and substances
Personal Protective Equipment	include that prescribed under legislations/regulation/codes of practice and workplace policies and practices
Tooling and equipment	<p>may include:</p> <ul style="list-style-type: none"> • hand tooling, power tooling • air tooling • specialist tooling for removal/ adjustment and testing equipment, including multimeters and test crimps
Materials	<p>may include:</p> <ul style="list-style-type: none"> • spare parts and cleaning material
Wiring/lighting circuit plans	<p>include:</p> <ul style="list-style-type: none"> • those in the range of vehicles • craft, plant and equipment
Information	<p>may include:</p> <ul style="list-style-type: none"> • verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets, diagrams or sketches

	<ul style="list-style-type: none"> • safe work procedures related to installation and repair of vehicle and trailer wiring/lighting systems • regulatory/legislative requirements pertaining to automotive industry • organisation work specifications and requirements • instructions issued by authorised enterprise or external persons
Testing	<p>May include:</p> <ul style="list-style-type: none"> • testing and electrical measurements, • fault finding, • reading and interpreting wiring diagrams, • soldering, crimping, repairing low voltage components and wiring
Communicating	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • verbal and visual instructions and fault reporting • site specific instructions • written instructions • plans or instructions related to job/task • telephones and pagers
Faults	<p>may include:</p> <ul style="list-style-type: none"> • inoperative systems, • open and short circuits and earthing

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • observing safety procedures and requirements • communicating effectively with others involved in or affected by the work • selecting methods and techniques appropriate to the circumstances • completing preparatory activity in a systematic manner • reading and interpreting low voltage wiring diagrams • repairing low voltage wiring/lighting to specification • testing low voltage wiring/lighting to determine short, open and earthing faults • completing essential post activity housekeeping
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • OHS and environmental regulations/requirements, equipment, material and personal safety requirements • common automotive terminology and vehicle safety requirements • low voltage theory for automotive application, including types of materials, components and wiring systems, including gas discharge lamps, automatic aiming • precautions to avoid side effects that could occur to ancillary systems from installation, testing and repair operations • operation of low voltage electrical wiring/lighting circuits and components relevant to the application • wiring and lighting testing and fault finding procedures

	<ul style="list-style-type: none"> • wiring and lighting repair procedures • working knowledge of site reporting procedures • enterprise quality procedures • work organisation and planning processes
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • collect, organise and understand information related to work orders, plans and safety procedures for installation, testing and repairing wiring and lighting systems • communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems • technical literacy and communication skills sufficient to interpret and apply common industry terminology, and interpret technical information and specifications related to low voltage wiring/lighting systems • plan and organise activities, including preparation and layout of worksite and obtaining of equipment and material to avoid backtracking or workflow interruptions • work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity • use mathematical ideas and techniques to correctly calculate time, assess tolerances, apply accurate measurements, calculate material requirements and establish quality checks • use pre-checking and inspection techniques to anticipate planning and scheduling problems and avoid wastage of time and material • manipulative and dexterity skills to perform low voltage wiring/lighting system installation, testing and repair functions • problem-solving skills for a limited range of procedural issues • use workplace technology related to installation and repair of vehicle and trailer wiring/lighting systems, including use of specialist tooling, measuring equipment, computerised technology and communication devices and the reporting/ documenting of results
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Operate Basic Machinery and Equipment
Unit Code	<u>AGR FME2 06 0714</u>
Unit Descriptor	This unit covers the process of operating and maintaining machinery and equipment and defines the standard required to: carry out pre-operational checks and maintenance; tag and report defects if necessary; secure attachments according to manufacturer's directions; operate machinery in a safe and controlled manner; implement shut-down and storage procedures; record maintenance and operation details. This unit applies to workers who operate and maintain machinery and equipment for agricultural, horticultural or land management enterprises. It is usually conducted within established routines, methods and procedures within enterprise guidelines.

Elements	Performance Criteria
1. Prepare basic machinery and equipment for use	<p>1.1 Basic machinery and equipment are identified and selected in accordance with supervisor's instructions.</p> <p>1.2 Routine pre-operational checks of machinery and equipment are carried out to manufacturer's specifications and/or enterprise procedures.</p> <p>1.3 Unsafe or faulty machinery and equipment are identified and segregated for repair or replacement in line with enterprise requirements.</p> <p>1.4 Occupational Health and Safety (OHS) hazards are identified and safety concerns reported to the supervisor.</p>
2. Operate basic machinery and equipment	<p>2.1 Personal Protective Equipment (PPE) is used and maintained according to procedures.</p> <p>2.2 Machinery and equipment are operated to manufacturer's specifications and in accordance with supervisor's instructions.</p> <p>2.3 Work is completed to supervisor's satisfaction and in accordance with OHS requirements.</p> <p>2.4 Environmental implications associated with machinery operation and maintenance are identified and accounted for.</p>
3. Check, clean and store basic machinery and equipment	<p>3.1 Machinery and equipment use is detailed and recorded in accordance with enterprise requirements.</p> <p>3.2 Machinery and equipment are cleaned, secured and stored to manufacturer's specifications and supervisor's instructions.</p> <p>3.3 Malfunctions, faults, wear or damage to machinery and equipment are identified and reported in line with enterprise requirements.</p> <p>3.4 Workplace areas are cleaned and maintained in line with OHS and enterprise requirements.</p>

Variable	Range
Basic machinery and equipment	<p>May include:</p> <ul style="list-style-type: none"> • lawn mowers • line cutters • lawn edger's • mechanized horticultural tillage equipment • motorised machinery used in landscape and turf construction projects • motorised machinery used in nursery production • pneumatic pruners and cutters • power tools • conveyors and pumps as used in agriculture, horticulture and land management <p>Does not include:</p> <ul style="list-style-type: none"> • chainsaws • tractors • vehicles • earth moving equipment • other machinery described elsewhere in these standards
Occupational Health and Safety (OHS) hazards	<p>May include:</p> <ul style="list-style-type: none"> • torn or improper use personal protective equipments • worn out repair tools • unprotected moveable parts • leakage /toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards,
Personal Protective Equipment	is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
OHS requirements	<p>may include:</p> <ul style="list-style-type: none"> • protective clothing and equipment • use of tooling and equipment • workplace environment and safety • handling of material • use of fire fighting equipment • enterprise first aid • hazard control and hazardous materials and substances

Evidence Guide			
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • carry out pre-operational checks and maintenance • tag and report defects if necessary • secure attachments according to manufacturer's directions • operate machinery in a safe and controlled manner • implement shut-down and storage procedures • record maintenance and operation details 		
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • pre-operational and safety checks for basic machinery and equipment 		
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	<ul style="list-style-type: none"> • hazards associated with the operation of basic machinery and equipment • operating principles and operating methods for basic machinery and equipment • procedures for cleaning, securing and storing basic machinery and equipment • risks associated with the operation of machinery and equipment in different weather and difficult terrain conditions • relevant legislation, regulations and Codes of Practice with regard to workplace OHS requirements, and the use and control of hazardous substances • environmental impacts and minimisation measures associated with the operation of basic machinery and equipment • enterprise policies with regard to machinery and equipment use, recording and reporting routines
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • use, maintain and store personal protective clothing and equipment • use safe operating procedures for basic machinery and equipment • carry out pre start checks for basic machinery and equipment • carry out basic servicing and maintenance of basic machinery and equipment • operate basic machinery and equipment • recognise caution or hazard signs and symbols • interpret tasks or information from labels, manuals or written instructions • record information accurately or verbally report information • use literacy skills to follow sequenced written instructions and record information accurately and legibly • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification and seeking advice from supervisor • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Drive Tractor without Attachments
Unit Code	AGR FME2 07 0714
Unit Descriptor	This unit covers the process of operating tractor without attached equipment and defines the standard required to: carry out pre-operational checks and maintenance including tagging defects; operate tractor in a safe and controlled manner; store machinery and record maintenance and operation details. This unit applies to workers in the agriculture, horticulture or land management sectors who operate tractors under some supervision with regular checking and within enterprise guidelines.

Elements	Performance Criteria
1. Identify systems and components of tractor	<p>1.1 Workplace information sources regarding tractor driving and operations are accessed and sourced.</p> <p>1.2 Tractor types, distinguishing characteristics and operation requirements are accessed and identified.</p> <p>1.3 Occupational Health and Safety (OHS) hazards are identified and applied in working with tractors and safety concerns and personal protective equipment needs are used.</p> <p>1.4 Systems and components and their functions are observed and precautions followed according manufacturer's instruction/operators manual.</p> <p>1.5 Tractor controls and functions, indicators and levers, and pedals are strictly observed and applied as per manufacturer's operator's manuals.</p> <p>1.6 Gear shifting, pedals utilization and fuel supply mechanisms are observed and applied as per operator's manual.</p>
2. Prepare tractor for operation	<p>2.1 Compliance documentation relevant to conducting tractor operations is accessed, interpreted and applied.</p> <p>2.2 Occupational Health and Safety (OHS) hazards in the work area are identified and safety concerns reported to the supervisor.</p> <p>2.3 Routine checks of tractors are conducted prior to use according to manufacturer's specifications and enterprise requirements.</p> <p>2.4 Pre-start, start-up, park and shutdown procedures are carried out according to manufacturer's operator's manual</p> <p>2.5 Tractor controls and functions are checked for serviceability and any faults rectified or reported.</p> <p>2.6 Work instructions and safety requirements are obtained, confirmed and applied to the allotted task.</p>

	2.7 Signage requirements are identified, obtained and implemented from the project traffic management plan.
3. Operate tractor	<p>3.1 Risks to self, others and the environment are recognised and avoided according to enterprise requirements.</p> <p>3.2 Suitable personal protective equipment is used, maintained and stored according to enterprise requirements.</p> <p>3.3 Tractor is operated according to low risk operating procedures in a controlled manner and monitored for performance and efficiency.</p> <p>3.4 Environmental impacts associated with tractor operation are recognised and minimised according to directions.</p>
4. Relocate tractor	<p>4.1 Tractor is driven safely between worksites, observing relevant codes and traffic management requirements.</p> <p>4.2 Tractor is prepared for relocation and safely parked according to enterprise requirements.</p>
5. Complete and check tractor operation	<p>5.1 Shut-down procedures are conducted according to manufacturer's specifications and enterprise requirements.</p> <p>5.2 Malfunctions, faults, irregular performance or damage to tractor are detailed and reported according to enterprise requirements.</p> <p>5.3 Tractor is cleaned, secured and stored according to enterprise and OHS requirements.</p> <p>5.4 Tractor operational reports are maintained to industry standards according to enterprise requirements.</p>

Variable	Range
Information sources	<p>may include:</p> <ul style="list-style-type: none"> • verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, Material Safety Data Sheets (MSDS), diagrams and sketches • safe work procedures related to inspection, servicing and maintenance of battery storage systems • regulatory/legislative requirements pertaining to automotive industry, including International design rules • engineer's design specifications and instructions • organization work specifications and requirements • instructions issued by authorized enterprise or external persons • International standards • verbal and graphical instructions and fault reporting and may include site specific instructions, written instructions, plans or instructions related to job/task, telephones and pagers
Tractor	<p>May include:</p> <ul style="list-style-type: none"> • two wheel drive • four wheel drive • front wheel assist tractors

	<ul style="list-style-type: none"> • is a self propelled, wheeled or tracked, commercial or agricultural machine • it may be a rigid or articulated, two wheel or all wheel drive • are to include wheeled and may include tracked types
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running • working under machines not secured • unprotected moveable parts • electricity and water, • toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • lifting practices, • stumps and logs in the soil or covered by debris • spillages, waste and debris especially on floors • uneven/ unstable terrain, trees, • overhead and underground services, • bridges, buildings, excavations, traffic, embankments, • cuttings, structures and hazardous materials
Tractor controls and functions	<p>May include:</p> <ul style="list-style-type: none"> • implements or other attachments, brakes and manoeuvrability
Relevant compliance documentation	<p>May include:</p> <ul style="list-style-type: none"> • legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • codes of practice • Employment and workplace relations legislation
Safety requirements	<p>May be:</p> <ul style="list-style-type: none"> • protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, use of First Aid equipment, hazard control and hazardous materials and substances • safe operating procedures to recognise hazards and prevent risks associated with underground and overhead services, other machines, personnel, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • emergency procedures, including: emergency shutdown and stopping, extinguishing fires, organisational First Aid requirements and evacuation
Safe parking	<p>May include:</p> <ul style="list-style-type: none"> • ensure access ways are clear, machinery is away from overhangs and refuel sites, safe distance from excavations, and secured from unauthorised access or movement

Tools and equipment	May include: <ul style="list-style-type: none"> • hand tools and maintenance equipment relevant to the particular tractor
Steering systems	May include: <ul style="list-style-type: none"> • conventional front-wheel steering • all wheel steering

Evidence Guide	
Critical Aspects of Competence	Demonstrate knowledge and skills to: <ul style="list-style-type: none"> • carry out pre-operational checks and maintenance including tagging defects • operate tractor in a safe and controlled manner • store machinery and equipment • record maintenance and operation details
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • tractor types, characteristics, technical capabilities and limitations • systems and components of tractors • tractor components, controls and features and operational functions • tractor steering systems and features • distinguishing characteristics of individual tractors including rated power • operating principles and operating methods • effects of adverse weather and difficult terrain conditions on tractor operation • duty of care to self, others and the environment • use and control of hazardous substances • relevant legislation with regard to machinery operation and licensing requirements • environmental Codes of Practice with regard to machinery operation • OHS legislative requirements, Codes of Practice, hazard identification and risk assessment
Underpinning Skills	Demonstrate skills of: <ul style="list-style-type: none"> • identify hazards • steer, manoeuvre and position tractor in a smooth and controlled manner • utilise the various components and controls of tractors • set and secure equipment for operation • safely and effectively operate tractors in adverse weather and difficult terrain conditions • demonstrate safe and environmentally responsible workplace practices • interpret manufacturers specifications, work and maintenance plans, and Material Safety Data Sheets (MSDSs) • effectively communicate faults and hazards, interpret and apply task instructions, report and maintain operational records • calculate and measure distance, volumes and weights

	<ul style="list-style-type: none"> • use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Operate Tractor with Tillage Implements
Unit Code	AGR FME2 08 0714
Unit Descriptor	This unit covers the process of operating tractors with or without attached equipment and defines the standard required to: carry out pre-operational checks and maintenance including tagging defects; operate tractor in a safe and controlled manner; selecting, removing and fitting attachments according to manufacturer's directions; implement hitching/non hitching procedures; store machinery and equipment and cleaning up; and record maintenance and operation details. This unit applies to workers in the agriculture, horticulture or land management sectors who operate tractors under some supervision with regular checking and within enterprise guidelines.

Elements	Performance Criteria
1. Prepare tractor for operation	<p>1.1 Work information and safety requirements are obtained, confirmed and applied to the allotted task.</p> <p>1.2 Occupational Health and Safety (OHS) hazards in the work area are identified and safety concerns reported to the supervisor.</p> <p>1.3 Routine checks of tractors are conducted prior to use according to manufacturer's specifications and enterprise requirements.</p> <p>1.4 Machinery and tools and equipment are selected to carry out tasks that are consistent with the requirements of the job and they are checked for serviceability and rectify or report any faults.</p> <p>1.5 Attached equipment appropriate to work requirements is identified and selected checked for safety and set for operation.</p> <p>1.6 Tractor and attached equipment faults or malfunctions are identified and reported for repair according to enterprise requirements.</p>
2. Select, remove and fit attachments	<p>2.1 Attachment for the task is selected by considering factors specified in operator's manual.</p> <p>2.2 Attachment is fitted and removed by following manufacturer's procedure.</p> <p>2.3 Equipment is securely attached and calibrated for operation to manufacturer's specifications.</p> <p>2.4 Test attachment is tested to ensure correct fitting and optimum working efficiency of operation.</p> <p>2.5 Driving speed and clearance of attachment are strictly followed from the ground as specified in operators manual.</p>

	<p>2.6 Adjustment of three-point linkage is observed and strictly followed as specified in operators manual while driving in and off farm and making turning on operation.</p> <p>2.7 Attachment is adjusted, calibrated and used in accordance with recommendations and design limits.</p> <p>2.8 Attachments is cleaned and stored in designated location.</p>
3. Operate tractor	<p>3.1 Risks to self, others and the environment are recognised and avoided according to enterprise requirements.</p> <p>3.2 Suitable Personal Protective Equipment is used, maintained and stored according to enterprise requirements.</p> <p>3.3 Tractor is operated according to low risk operating procedures in a controlled manner and monitored for performance and efficiency.</p> <p>3.4 Environmental impacts associated with tractor operation are recognised and minimised according to directions.</p>
4. Complete and check tractor operation	<p>4.1 Engine shut- down procedures are conducted according to manufacturer's specifications and enterprise requirements</p> <p>4.2 Hitching/non- hitching procedures are conducted according to manufacturer's specifications and enterprise requirements.</p> <p>4.3 Malfunctions, faults, irregular performance or damage to tractor and attached equipment are detailed and reported according to enterprise requirements.</p> <p>4.4 Tractor and attached equipment are cleaned and decontaminated where necessary, secured and stored according to enterprise and OHS requirements.</p> <p>4.5 Tractor operational reports are maintained to industry standards according to enterprise requirements.</p>

Variable	Range
Work information	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, Material Safety Data Sheets (MSDS), diagrams and sketches • safe work procedures related to inspection, servicing and maintenance of battery storage systems • regulatory/legislative requirements pertaining to automotive industry, including International Design Rules • engineer's design specifications and instructions • organization work specifications and requirements • instructions issued by authorized enterprise or external persons • International standards • verbal and graphical instructions and fault reporting and may include site specific instructions, written instructions, plans or instructions related to job/task, telephones and pagers

Safety requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, use of First Aid equipment, hazard control and hazardous materials and substances • safe operating procedures to recognise hazards and prevent risks associated with underground and overhead services, other machines, personnel, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • emergency procedures, including: emergency shutdown and stopping, extinguishing fires, organisational First Aid requirements and evacuation • hazards and risks, which may include: uneven/ unstable terrain, trees, fires, overhead and underground services, bridges, buildings, excavations, traffic, embankments, cuttings, structures and hazardous materials
Occupational Health and Safety (OHS)	<p>are to be in accordance with applicable legislation and regulations, and organisational safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> • personal protective equipment and clothing • workplace environment and safety, safety equipment • enterprise first aid and first aid equipment • hazard and risk control and hazardous materials and substances electrical safety • elimination of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures • use of tooling and equipment • handling of material • use of fire fighting equipment
Tractors	<p>May include:</p> <ul style="list-style-type: none"> • two wheel drive • four wheel drive • front wheel assist tractors • is a self propelled, wheeled or tracked, commercial or agricultural machine • it may be a rigid or articulated, two wheel or all wheel drive • they are normally used for towing and/or providing a power take off (PTO) for specified attachments • are to include wheeled and may include tracked types
Tools and equipment	<p>Are to include:</p> <ul style="list-style-type: none"> • hand tools and maintenance equipment relevant to the particular tractor
Attachment	<p>may include:</p> <ul style="list-style-type: none"> • a front blade, slasher, mower, auger • drag broom, power broom, loading platform • rotary hoe, spraying equipment and disc plough • disc harrow, mould board plough, reversible plough • power harrow, chisel plough, subsoiled

Personal Protective Equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
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Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skill to:</p> <ul style="list-style-type: none"> • carry out pre-operational checks and maintenance including tagging defects • set and secure attachments according to manufacturer's directions • operate tractor in a safe and controlled manner • knowledge of the requirements, procedures and instructions for conducting tractor operations • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of tractor operations, which are to include: <ul style="list-style-type: none"> ➢ the minimum of three of the operations listed in the Range Statement, and ➢ the fitting and removal of at least one attachment • working with others to undertake and complete tractor operations that meet all of the required outcomes • consistent timely completion of tractor operations that safely, effectively and efficiently meet the required outcomes • implement hitching/non-hitching procedures • store machinery and equipment • record maintenance and operation details
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • tractor components, controls and features and operational functions • tractor steering systems and features • distinguishing characteristics of individual tractors including rated power • site and equipment safety requirements • attached equipment, features and operational functions and procedures • operating • tractor and attachment operating principles methods and techniques related to essential tasks • load limits and the principles of weight distribution with regard to load shifting and tractor movement • operational, maintenance and basic diagnostic procedures • site isolation and traffic control responsibilities and authorities • materials characteristics • materials safety data sheet and materials handling methods • project quality requirements • methods of changing machine attachments • safe operating techniques in all terrain • JSAs/Safe work method statement • effects of adverse weather and difficult terrain conditions on tractor operation

	<ul style="list-style-type: none"> • duty of care to self, others and the environment • use and control of hazardous substances • relevant legislation with regard to machinery operation and licensing requirements • environmental Codes of Practice with regard to machinery operation • OHS legislative requirements, Codes of Practice, hazard identification and risk assessment
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe operating procedures • steer, manoeuvre and position tractor in a smooth and controlled manner • utilise the various components and controls of tractors • set and secure equipment for operation • safely and effectively operate tractors in adverse weather and difficult terrain conditions • demonstrate safe and environmentally responsible workplace practices • interpret manufacturers specifications, work and maintenance plans, and Material Safety Data Sheets (MSDSs) • effectively communicate faults and hazards, interpret and apply task instructions, report and maintain operational records • calculate and measure distance, volumes and weights • use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities • apply legislative, organisation and site requirements and procedures • apply site and equipment safety requirements • apply tractor and attachment operating techniques • interpret drawings and sketches • apply machine attachments changing procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Operate Tractor with Trailer
Unit Code	AGR FME2 09 0714
Unit Descriptor	This unit covers the process of operating tractors with or without attached equipment and defines the standard required to: carry out pre-operational checks and maintenance including tagging defects; set and secure attachments according to manufacturer's directions; operate tractor in a safe and controlled manner; trailer connect and disconnect procedures; store machinery and equipment and record maintenance and operation details. This unit applies to workers in the agriculture, horticulture or land management sectors who operate tractors under some supervision with regular checking and within enterprise guidelines.

Elements	Performance Criteria
1. Prepare tractor for operation	<p>1.1 Occupational Health and Safety (OHS) hazards in the work area are identified and safety concerns reported to the supervisor.</p> <p>1.2 Routine checks of tractors and attached trailed equipment are conducted prior to use according to manufacturer's specifications and enterprise requirements.</p> <p>1.3 Attached trailed equipment appropriate to work requirements, checked for safety is identified and selected and set for operation.</p> <p>1.4 Tractor and attached trailed equipment faults or malfunctions are identified and reported for repair according to enterprise requirements.</p>
2. Operate tractor	<p>2.1 Risks to self, others and the environment are recognised and avoided according to enterprise requirements.</p> <p>2.2 Suitable Personal Protective Equipment is used, maintained and stored according to enterprise requirements.</p> <p>2.3 Tractor is operated according to low risk operating procedures in a controlled manner and monitored for performance and efficiency.</p> <p>2.4 Environmental impacts associated with tractor operation are recognised and minimised according to directions.</p>
3. Complete and check tractor operation	<p>3.1 Connect and disconnect procedures are conducted according to manufacturer's specifications and enterprise requirements.</p> <p>3.2 Malfunctions, faults, irregular performance or damage to tractor and attached trailed equipment are detailed and reported according to enterprise requirements.</p> <p>3.3 Tractor and attached trailed equipment is cleaned and decontaminated where necessary, secured and stored according to enterprise and OHS requirements.</p>

	3.4 Tractor operational reports are maintained to industry standards according to enterprise requirements.
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Variable	Range
Occupational Health and Safety (OHS) hazards	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running • working under machines not secured • unprotected moveable parts • broken or damaged equipment, • flammable materials and fire hazards, • lifting practices, • stumps and logs in the soil or covered by debris • uneven/ unstable terrain, trees, • overhead and underground services, • bridges, buildings, excavations, traffic, embankments, • cuttings, structures and hazardous materials
Routine checks	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • oils and water level • tyre pressure • couplings • loose bolts and nuts • wear and tear of body and components
Attached trailed equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • trailers- semi mounted, trailed • disk harrows • sprayers • PTO Operated trailed threshers • baling equipment
Tractor	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • two wheel drive • four wheel drive • front wheel assist tractors
Personal Protective Equipment	Is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • carry out pre-operational checks and maintenance including tagging defects • set and secure attachments according to manufacturer's directions • operate tractor in a safe and controlled manner • connect and disconnect trailed equipment procedures • store machinery and equipment • record maintenance and operation details
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • tractor components, controls and features and operational functions

	<ul style="list-style-type: none"> • tractor steering systems and features • attached trailed equipment, features and operational functions and procedures • operating principles and operating methods • load limits and the principles of weight distribution with regard to load shifting and tractor movement • distinguishing characteristics of individual tractors including rated power • effects of adverse weather and difficult terrain conditions on tractor operation • duty of care to self, others and the environment • use and control of hazardous substances • relevant legislation with regard to machinery operation and licensing requirements • environmental Codes of Practice with regard to machinery operation • OHS legislative requirements, Codes of Practice, hazard identification and risk assessment
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe operating procedures • steer, manoeuvre and position tractor in a smooth and controlled manner • utilise the various components and controls of tractors • set and secure trailed equipment for operation • safely and effectively operate tractors in adverse weather and difficult terrain conditions • demonstrate safe and environmentally responsible workplace practices • interpret manufacturers specifications, work and maintenance plans, and Material Safety Data Sheets (MSDSs) • effectively communicate faults and hazards, interpret and apply task instructions, report and maintain operational records • calculate and measure distance, volumes and weights • use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Operate Cane Haulage Tractor
Unit Code	AGR FME2 10 0714
Unit Descriptor	This unit covers the process of preparing and operating a cane haulage tractor in the sugar cane production industry and defines the standard required to: check haulage equipment prior to use; determine operating methods and load from farm maps and instructions; haul cane safely and efficiently; identify and report faults or breakdowns; conduct connect and disconnect trailer procedures; maintain records.

Elements	Performance Criteria
1. Prepare cane haulage tractor	<p>1.1 Routine pre-operational checks of cane haulage tractor are completed to manufacturer's specifications and enterprise requirements.</p> <p>1.2 Cabin FOPS/ROPS and mesh checking is carried out according to enterprise instructions and safety routines.</p> <p>1.3 Potential and existing Occupational Health and Safety (OHS) hazards in the workplace are recognised, risk is assessed and minimised according to enterprise requirements.</p> <p>1.4 Suitable Personal Protective Equipment is selected, used and maintained according to OHS requirements.</p>
2. Carry out cane haulage operations	<p>2.1 Tractor is operated in a safe, controlled and correct manner is monitored for performance and efficiency.</p> <p>2.2 Safe operating procedures are observed and noted during the use of tractor, and equipment in accordance with workplace guidelines.</p> <p>2.3 Cane haulage tractor and trailer are correctly selected, hauled and delivered efficiently, safely and co-operatively.</p> <p>2.4 Risks to self, others and the environment are anticipated and minimisation strategies implemented accordingly.</p> <p>2.5 Emergency procedures are identified and followed as per organization's guideline.</p> <p>2.6 Environmental implications associated with cane haulage are identified, assessed and reported to the supervisor.</p>
3. Complete cane haulage operation	<p>4.1 Engine shut-down and trailer hitching/unhitching procedures for cane haulage tractor and trailer respectively are completed to manufacturer's specifications and enterprise requirements.</p> <p>4.2 Records are completed and maintained according to enterprise requirements.</p> <p>4.3 Malfunctions, faults, irregular performance and damage to cane haulage tractor and trailer are identified, detailed and reported according to enterprise requirements.</p>

	4.4 Cane haulage tractor and trailer are cleaned, secured and stored according to OHS and enterprise requirements.
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Variable	Range
Cane haulage tractors	May include: <ul style="list-style-type: none"> trucks infield transporters tractor-trailer combinations and other cane transporters
FOPS/ROPS	May include: <ul style="list-style-type: none"> Falling object protective and roll over protective structures
Occupational Health and Safety (OHS) hazards	May include: <ul style="list-style-type: none"> sharp cutting tooling and instruments, torn or improper use personal protective equipments worn out repair tools servicing while engine is running working under machines not secured unprotected moveable parts damaged packing material or containers, broken or damaged equipment, flammable materials and fire hazards, stumps and logs in the soil or covered by debris crash with tractors/trucks
Personal Protective Equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Safe operating procedures	May include: <ul style="list-style-type: none"> operational risk assessment and treatments associated with vehicular movement, toxic substances, electrical safety, machinery movement and operation, manual and mechanical lifting and shifting, working in proximity to others and site visitors emergency shutdown and stopping of Equipment, extinguishing fires, enterprise first aid requirements and site evacuation
Emergency procedures	related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: <ul style="list-style-type: none"> check haulage equipment prior to use determine operating methods and load from farm maps and instructions haul cane safely and efficiently identify and report faults or breakdowns conduct engine shutdown and hitching/unhitching trailer procedures maintain records
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> components, controls and features of cane haulage tractor trailer and their functions

	<ul style="list-style-type: none"> • operating principles and operating methods for cane haulage tractor and trailers • principles of weight distribution with regard to load shifting and tractor movement • risks associated with the operation of cane haulage tractor in different weather and difficult terrain conditions • OHS and environment legislative and enterprise requirements • environmental codes of practice with regard t the operation of machinery • legislation and regulations with regard to the operation of cane haulage tractors and licensing requirements • cane haulage processes and spillage minimisation techniques • cane harvesting processes as they relate to collection and haulage of harvests 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify hazards and apply work practices • operate a variety of pushing and towing haulage tractors • demonstrate emergency operating procedures in normal and adverse conditions • demonstrate safe and environmentally responsible workplace practices • obtain relevant licenses and permits • read and interpret farms maps, operators manuals, manufacturer’s specifications, work and maintenance plans, and Material Safety Data Sheets (MSDSs) • effectively communicate faults, malfunctions and workplace hazards, report and maintain operational records • comprehend and apply task instructions • measure and calculate volumes, load weights, consumptions and servicing requirements 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify hazards and apply safe work practices • operate a variety of pushing and towing haulage tractors • demonstrate emergency operating procedures in normal and adverse conditions • demonstrate safe and environmentally responsible workplace practices • obtain relevant licences and permits • read and interpret farm maps, operators manuals, manufacturers specifications, work and maintenance plans, and Material Safety Data Sheets (MSDSs) • effectively communicate faults, malfunctions and workplace hazards, report and maintain operational records • comprehend and apply task instructions • measure and calculate volumes, load weights, consumption and servicing requirements 		
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>		
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Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Conduct Front-end Loader Operations
Unit Code	AGR FME2 11 0714
Unit Descriptor	This unit covers the process of using front-end loaders on rural lands and defines the standard required to: operate the machine safely; operate the machine's features and attachments consistent with operator manual; carry out day to day servicing and minor maintenance. This unit relates to the operation and maintenance of front-end loaders used on rural lands.

Elements	Performance Criteria
1. Prepare for operations	<p>1.1 Safety rules and regulations, including site rules and legislation and site specific instructions are observed.</p> <p>1.2 Pre start checks are carried out in accordance with manufacturers and site authorised procedures.</p> <p>1.3 Briefings or hand over details are received, interpreted and clarified in accordance with site requirements.</p>
2. Operate front-end loader	<p>2.1 Start-up, park-up, shut-down and communication procedures are carried out in accordance with manufacturers' and/or site specific requirements.</p> <p>2.2 Front-end loader operations are conducted, controlled and monitored within equipment and operational limitations.</p> <p>2.3 Safe operating practices, including operating controls, monitoring gauges and systems, conducting safety checks and use of two way radio for communication are carried out within manufacturers' and/or site specific requirements.</p> <p>2.4 Loading technique is selected and modified to appropriately meet changing work conditions which may include variable grades, work under high faces, and work with varying materials, haulage units and materials handling facilities.</p> <p>2.5 Safe towing practices are demonstrated in accordance with the authorised equipment and connection capabilities.</p>
3. Carry out basic operator maintenance	<p>3.1 Inspection and fault finding are conducted in accordance with manufacturers' specifications and/or site requirements and reported.</p> <p>3.2 Routine operational servicing and lubrication tasks are carried out to manufacturers' and/or site requirements.</p> <p>3.3 Minor maintenance is carried out to manufacturers' and/or site requirements.</p> <p>3.4 Records are maintained in accordance with site requirements.</p> <p>3.5 Vehicle washing and housekeeping is carried out to manufacturers' and/or site requirements.</p>

Variable	Range
Safety rules	May include: <ul style="list-style-type: none"> • operation • transport • handling • storage • personal protective equipment • movement of machinery and equipment
Pre start checks	May include <ul style="list-style-type: none"> • oils and water level • tyre pressure • couplings • loose bolts and nuts • wear and tear of body and components
Safe operating practices	May include: <ul style="list-style-type: none"> • Safe Working Limits (SWL) of machine • moving loads • working with other equipment and machinery • working near overhead powerlines and underground facilities
Applications	May include: <ul style="list-style-type: none"> • all types of projects on farms and rural lands
Emergency procedures	related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: <ul style="list-style-type: none"> • operate the machine safely • operate the machine's features and attachments consistent with operator manual • carry out day to day servicing and minor maintenance
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • site and equipment safety requirement • equipment characteristics, technical capabilities and limitations • operational and maintenance procedures
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • access, interpret and apply technical information • maintain equipment records • use relevant hand tools • work wearing personal protective equipment • operate front-end loaders in accordance with site/manufacture's specifications • recognise caution or hazard signs and symbols • interpret tasks or information from labels, manuals or written instructions • record information accurately or verbally report information • use literacy skills to follow sequenced written instructions and record information accurately and legibly

	<ul style="list-style-type: none"> • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification and seeking advice from supervisor • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Repair and Fit Tyres and Tubes
Unit Code	AGR FME2 12 0714
Unit Descriptor	This unit covers the competence required to remove, inspect, repair and fit tubes and tyres. The unit includes identification and confirmation of work requirement, preparation for work, removal, repair and fitting of tyres and tubes and completion of work finalisation processes, including clean-up and documentation.

Elements	Performance Criteria
1. Prepare to remove, repair and fit tyres and tubes	<p>1.1 Nature and scope of work requirements are identified and confirmed.</p> <p>1.2 Workplace information sources are accessed and procedures strictly adhered.</p> <p>1.3 OHS requirements including regulatory requirements and Personal Protective Equipment needs are observed throughout the work.</p> <p>1.4 Procedures and information such as workshop manuals and specifications, and tooling required are sourced.</p> <p>1.5 Method options are analysed and those most appropriate to the circumstances are selected and prepared.</p> <p>1.6 Technical requirements for removal, repair and fitting of tyres and tubes are sourced and support equipment is identified and prepared.</p> <p>1.7 Relevant tools, equipment and materials requirements are identified and made ready for use prior to the start of work practice as per job specification and work place procedures.</p>
2. Remove tyre from rim	<p>2.1 Methods for the removal are implemented in accordance with workplace procedures and manufacturer/component supplier specifications.</p> <p>2.2 Safe operating procedures are observed and noted during the use of tools/ equipment in accordance with workplace guidelines.</p> <p>2.3 Removal of tyre is carried out in accordance with vehicle/ plant/system manufacturer/component supplier requirements.</p> <p>2.4 Tyre is removed without causing damage to any component.</p> <p>2.5 Tyre is inspected in readiness for repair.</p> <p>2.6 Tyre removal activity is carried out according to industry regulations/guidelines, OHS legislation, legislation and enterprise procedures/policies.</p> <p>2.7 Emergency procedures are identified and followed as per organization's guideline.</p>

3. Repair tyres and tubes	<p>3.1 Methods for the repair are implemented in accordance with workplace procedures and manufacturer/component supplier specifications.</p> <p>3.2 Repair of tyre and tube are carried out in accordance with vehicle/plant/system manufacturer/component supplier requirements.</p> <p>3.3 Tyre and tube are repaired without causing damage to any component.</p> <p>3.4 Tyre removal activity is carried out according to industry regulations/guidelines, OHS legislation, legislation and enterprise procedures/policies.</p>
4. Fit tyres and tubes	<p>4.1 Methods for the fitting are implemented in accordance with workplace procedures and manufacturer/component supplier specifications.</p> <p>4.2 Tyre and tube are mounted onto rim.</p> <p>4.3 Tyre and tube assemblies are pressure tested.</p>
5. Prepare tyre and tube assembly for use or storage	<p>5.1 Repair documentation is completed.</p> <p>5.2 Final inspection is made to ensure work is to workplace expectations.</p> <p>5.3 Tyre and tube assemblies are presented for use or storage to workplace expectations.</p> <p>5.4 Job card is processed in accordance with workplace procedures.</p>

Variable	Range
Information sources	<p>may include:</p> <ul style="list-style-type: none"> • verbal or written and graphical instructions, • signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets, • safe work procedures related to the removal, repair and fitting of tubes and tyres (light) • regulatory/legislative requirements pertaining to the automotive industry, • organisation work specifications and requirements • instructions issued by authorised persons
OHS requirements	<p>Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include:</p> <ul style="list-style-type: none"> • protective clothing and equipment, • use of tooling and equipment, • workplace environment and safety, • handling of material, • use of fire fighting equipment, enterprise first aid, • hazard control and hazardous materials and substances • regulations, including internal company quality policy and standards and enterprise operations and procedures

Personal Protective Equipment	is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Repair	Repairs to tyres are to be within the specifications and limits manufacturer's instruction
Tyre	may include: <ul style="list-style-type: none"> • tube, tubeless, dual sizing, radial, belted bias, directional
Tools, equipment and materials	May include: <ul style="list-style-type: none"> • hand tooling, power tooling • specialised equipment such as buffs, spreaders, tyre removal equipment, immersion tanks and various repair material
Safe operating procedures	May include: <ul style="list-style-type: none"> • the conduct of operational risk assessment and treatments associated with vehicular movement • electrical safety, • machinery movement and operation, • manual and mechanical lifting and shifting, • working in proximity to others and site visitors
Emergency procedures	May include: <ul style="list-style-type: none"> • emergency shutdown and stopping of equipment, • extinguishing fires, • enterprise first aid requirements and site evacuation

Evidence Guide			
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence in:</p> <ul style="list-style-type: none"> • observing safety procedures and requirements • selecting methods and techniques appropriate to the circumstances • completing preparatory activity in a systematic manner • conducting the removal, inspection, and fitting of tyres in accordance with workplace and manufacturer/ component supplier requirements • completing the work within workplace timeframes 		
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • OHS regulations/requirements, equipment, material and personal safety requirements • dangers of working with tyre changing equipment • general knowledge of types of rim and tyre construction, terms and codes • types and layout of service/repair manuals (hard copy and electronic) • removal, repair and fitting procedures • enterprise quality procedures • work organisation and planning processes 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • apply interpretive skills sufficient to locate, interpret and apply manufacturer/component supplier procedures, workplace policies and procedures • apply analytical skills required for identification and analysis of technical information 		
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	<ul style="list-style-type: none"> • apply planning and organising skills to own work activities, including making good use of time and resources, sorting out priorities and monitoring one's own performance • establish safe and effective work processes which anticipate and/or resolve problems and downtime, to systematically develop solutions to avoid or minimise reworking and avoid wastage • use mathematical ideas and techniques to correctly calculate time, assess tolerances, apply accurate measurements, calculate material requirements and establish quality checks • use workplace technology related to the removal, repair and fitting of tubes and tyres, including the use of measuring equipment, specialist tooling, computerised technology and communication devices and the reporting/documenting of results
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Participate in Environmentally Sustainable Work Practices
Unit Code	AGR FME2 13 0714
Unit Descriptor	This unit covers the performance outcomes, skills and knowledge required to effectively measure current resource use and to carry out improvements including reducing the negative environmental impact of work practices. This unit requires the ability to access industry information, and applicable legislative and Occupational Health and Safety (OHS) guidelines. This unit applies to operators/team members under supervision or guidance, who are required to follow workplace procedures and instructions, and to work in an environmentally sustainable manner. It covers efficient resource use; potential environmental hazards; regulatory compliance; improving environmental performance (within the scope of competency, authority and own level of responsibility). It addresses the knowledge, processes and techniques necessary to participate in environmentally sustainable work practices.

Elements	Performance Criteria
1. Identify current resource use	<p>1.1 Workplace environmental and resource efficiency issues are identified.</p> <p>1.2 Resources used in own work role are identified.</p> <p>1.3 Current usage of resources is documented and measured using appropriate techniques.</p> <p>1.4 Documentations measuring current usage, using technology (such as software systems) are recorded and filed, where applicable.</p> <p>1.5 Workplace environmental hazards are identified and reported to appropriate personnel.</p>
2. Comply with environmental regulations	<p>2.1 Workplace procedures are followed to ensure compliance.</p> <p>2.2 Breaches or potential breaches are reported to appropriate personnel.</p>
3. Seek opportunities to improve resource efficiency	<p>3.1 Organisational plans are followed to improve environmental practices and resource efficiency.</p> <p>3.2 Part of a team is worked, where relevant, to identify possible areas for improvements to work practices in own work area.</p> <p>3.3 Suggestions are made for improvements to workplace practices in own work area.</p>

Variable	Range
Environmental and resource efficiency issues	<p>May include:</p> <ul style="list-style-type: none"> maximising opportunities to improve business environmental performance minimising environmental risks

	<ul style="list-style-type: none"> • promoting more efficient production and consumption of natural resources, for example minimising waste by participating in or using a waste management system • using resources efficiently such as material usage, energy usage (seeking alternative sources of energy or energy conservation) or efficient water usage
Compliance	<p>May include:</p> <ul style="list-style-type: none"> • meeting relevant laws, by-laws and regulations or best practice to support compliance in environmental performance and sustainability at each level as required (such as Environmental Protection or Biodiversity Conservation Act): <ul style="list-style-type: none"> ➤ international ➤ local government ➤ industry ➤ organisation

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate skills and knowledge competence in:</p> <ul style="list-style-type: none"> • accessing, interpreting and complying with a range of environment/sustainability legislation and procedural requirements relevant to daily responsibilities • accurately following organisational information to participate in and support an improved resource efficiency process and reporting as required • developing and/or using tools such as inspection checklists, to collect and measure relevant information on organisation resource consumption, within work role • identifying organisational improvements by applying efficient resource use to daily activities • knowledge of environmental and resource hazards/risks
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • environmental and resource hazards/risks • environmental or sustainability legislation, regulations and codes of practice applicable to own work role • OHS issues and requirements • organisational structure, and reporting channels and procedures • relevant environmental and resource efficiency systems and procedures • sustainability in the workplace • terms and conditions of employment including policies and procedures, such as daily tasks, employee and employer rights, equal opportunity
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • analytical skills to comply with all relevant legislation associated with job specifications and procedures • communication and problem-solving skills to question, seek clarification and make suggestions relating to work requirements and efficiency

	<ul style="list-style-type: none"> • communication and teamwork skills to recognise procedures; to follow instructions; to respond to change, such as current workplace environmental/sustainability frameworks; and to support team work and participation in a sustainable organisation • literacy, numeracy and technology skills to interpret workplace information in relation to work role, and to document and measure resource use • technology skills to select and use technology appropriate for a task • use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Participate in Workplace Communication
Unit Code	AGR FME2 14 0714
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

Elements	Performance Criteria
1. Obtain and convey workplace information	<p>1.1 Specific and relevant information is accessed from appropriate sources.</p> <p>1.2 Effective questioning, active listening and speaking skills are used to gather and convey information.</p> <p>1.3 Appropriate medium is used to transfer information and ideas.</p> <p>1.4 Appropriate non- verbal communication is used.</p> <p>1.5 Appropriate lines of communication with supervisors and colleagues are identified and followed.</p> <p>1.6 Defined workplace procedures for the location and storage of information are used.</p> <p>1.7 Personal interaction is carried out clearly and concisely.</p>
2. Participate in workplace meetings and discussions	<p>2.1 Team meetings are attended on time.</p> <p>2.2 Own opinions are clearly expressed and those of others are listened to without interruption.</p> <p>2.3 Meeting inputs are made consistent with the meeting purpose and protocols established.</p> <p>2.4 Workplace interactions are conducted in a courteous manner.</p> <p>2.5 Questions about simple routine workplace procedures and matters concerning working conditions of employment are asked and responded.</p> <p>2.6 Meetings outcomes are interpreted and implemented.</p>
3. Complete relevant work related documents	<p>3.1 Range of forms relating to conditions of employment is completed accurately and legibly.</p> <p>3.2 Workplace data is recorded on standard workplace forms and documents.</p> <p>3.3 Basic mathematical processes are used for routine calculations.</p> <p>3.4 Errors in recording information on forms/ documents are identified and properly acted upon.</p> <p>3.5 Reporting requirements to supervisor are completed according to organizational guidelines.</p>

Variable	Range
Appropriate sources	May include but not limited to: <ul style="list-style-type: none"> • Team members • Suppliers • Trade personnel • Local government • Industry bodies
Medium	May include but not limited to: <ul style="list-style-type: none"> • Memorandum • Circular • Notice • Information discussion • Follow-up or verbal instructions • Face to face communication
Storage	May include but not limited to: <ul style="list-style-type: none"> • Manual filing system • Computer-based filing system
Protocols	May include but not limited of: <ul style="list-style-type: none"> • Observing meeting • Compliance with meeting decisions • Obeying meeting instructions
Workplace interactions	May include but not limited to: <ul style="list-style-type: none"> • Face to face • Telephone • Electronic and two way radio • Written including electronic, memos, instruction and forms, non-verbal including gestures, signals, signs and diagrams
Forms	May include but not limited to: <ul style="list-style-type: none"> • Personnel forms, telephone message forms, safety reports

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> • Prepare written communication following standard format of the organization • Access information using communication equipment • Made use of relevant terms as an aid to transfer information effectively • Convey information effectively adopting the formal or informal communication
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • Effective communication • Different modes of communication • Written communication • Organizational policies • Communication procedures and systems • Technology relevant to the enterprise and the individual's work responsibilities
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • Follow simple spoken language • Perform routine workplace duties following simple written

	<p>notices</p> <ul style="list-style-type: none"> • Participate in workplace meetings and discussions • Complete work related documents • Estimate, calculate and record routine workplace measures • Do basic mathematical processes of addition, subtraction, division and multiplication • relate to people of social range in the workplace • Gather and provide information in response to workplace Requirements
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Work in Team Environment
Unit Code	AGR FME2 15 0714
Unit Descriptor	This unit covers the skills, knowledge and attitudes to identify role and responsibility as a member of a team.

Elements	Performance Criteria
1. Describe team role and scope	<p>1.1 The role and objective of the team are identified from available sources of information.</p> <p>1.2 Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources.</p>
2. Identify own role and responsibility within team	<p>2.1 Individual role and responsibilities within the team environment are identified.</p> <p>2.2 Roles and responsibility of other team members are identified and recognized.</p> <p>2.3 Reporting relationships within team and external to team are identified.</p>
3. Work as a team member	<p>3.1 Effective and appropriate forms of communications used and interactions undertaken with team members who contribute to known team activities and objectives.</p> <p>3.2 Effective and appropriate contributions are made to complement team activities and objectives, based on individual skills and competencies and workplace context.</p> <p>3.3 Protocols are observed in reporting using standard operating procedures.</p> <p>3.4 Contribution is made to the development of team work plans based on an understanding of team's role and objectives and individual competencies of the members.</p>

Variable	Range
Role and objective of team	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Work activities in a team environment with enterprise or specific sector • Limited discretion, initiative and judgment maybe demonstrated on the job, either individually or in a team environment
Sources of information	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Standard operating and/or other workplace procedures • Job procedures • Machine/equipment manufacturer's specifications and instructions • Organizational or external personnel • Client/supplier instructions

	<ul style="list-style-type: none"> • Quality standards • OHS and environmental standards
Workplace context	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Work procedures and practices • Conditions of work environments • Legislation and industrial agreements • Standard work practice including the storage, safe handling and disposal of chemicals • Safety, environmental, housekeeping and quality guidelines

Evidence Guide	
Critical aspects of competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • Operate in a team to complete workplace activity • Work effectively with others • Convey information in written or oral form • Select and use appropriate workplace language • Follow designated work plan for the job • Report outcomes
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Communication process • Team structure • Team roles • Group planning and decision making
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Communicate appropriately, consistent with the culture of the workplace
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Develop Business Practice
Unit Code	AGR FME2 16 0714

Elements	Performance Criteria
1. Identify business opportunity	<p>1.1 Business opportunities are investigated and identified.</p> <p>1.2 Feasibility study is undertaken to determine likely business viability.</p> <p>1.3 Market research on product or service is undertaken.</p> <p>1.4 Assistance with feasibility study of specialist and relevant parties is sought as required.</p> <p>1.5 Impact of emerging or changing technology including e-commerce, on business operations is evaluated.</p> <p>1.6 Practicability of business opportunity is assessed in line with perceived risks, returns sought and resources available.</p> <p>1.7 Business plan is completed for operation.</p>
2. Identify personal business skills	<p>2.1 Financial and business skills available are identified and taken into account when business opportunities are researched.</p> <p>2.2 Personal skills/attributes are assessed and matched against those perceived as necessary for a particular business opportunity.</p> <p>2.3 Business risks are identified and assessed according to resources available and personal preferences.</p>
3. Plan for establishment of business operation	<p>3.1 Business structure and operations are determined and documented.</p> <p>3.2 Procedures are developed and documented to guide operations.</p> <p>3.3 Financial backing is secured for business operation.</p> <p>3.4 Business legal and regulatory requirements are identified and complied.</p> <p>3.5 Human and physical resources required to commence business operation are determined.</p> <p>3.6 Recruitment strategies are developed and implemented.</p>
4. Implement establishment plan	<p>4.1 Marketing of business operation is undertaken.</p> <p>4.2 Physical and human resources are obtained to implement business operation.</p> <p>4.3 Operational unit is established to support and coordinate business operation.</p> <p>4.4 Monitoring process is developed and implemented for managing operation.</p>

	<p>4.5 Legal documents are carefully maintained and relevant records are kept and updated to ensure validity and accessibility.</p> <p>4.6 Contractual procurement rights for goods and services including contracts with relevant people, negotiated and secured as required in accordance with the business plan.</p> <p>4.7 Options for leasing/ownership of business premises identified and contractual arrangements are completed in accordance with the business plan.</p>
5. Review implementation process	<p>5.1 Review process for implementation of business operation is developed and implemented.</p> <p>5.2 Improvements in business operation and associated management process are identified.</p> <p>5.3 Identified improvements are implemented and monitored for effectiveness.</p>

Variable	Range
Business opportunities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • expected financial viability • skills of operator • amount and types of finance available • returns expected or required by owners • likely return on investment • finance required • lifestyle issues
Business viability	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • opportunities available • market competition • timing/ cyclical considerations • skills available • resources available • location and/ or premises available • risk related to a particular business opportunity, especially • in regard to Occupational Health and Safety and • environmental considerations
Specialist and relevant parties	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Chamber of commerce • Financial planners and financial institution representatives, business planning specialists and marketing specialists • accountants • lawyers and providers of legal advice • government agencies • industry/trade associations • online gateways • business brokers/business consultants

Personal skills/attributes	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • technical and/ or specialist skills • business knowledge and skills • entrepreneurship • willingness to take risks
Business risks	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • occupational health and safety and environmental considerations • relevant legislative requirements • security of investment • market competition • security of premises/ location • supply and demand • resources available
Human and physical resources	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • software and hardware • office premises • communications equipment • specialist services through outsourcing, contracting and consultancy • staff • vehicles
Operational unit	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • office location staffed with required personnel and equipped to service and support business • home-based site or other location such as leased or owned property
Legal documents	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • partnership agreements, constitution documents, statutory books for companies (Register of Members, Register of Directors and Minute Books), Certificate of Incorporation, Franchise Agreements and financial documentation, appropriate software for financial records • recordkeeping including personnel, financial, taxation, OHS and environmental
Contracts with relevant people	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • owners, suppliers, employees, landlords, agents, distributors, customers or any person with whom the business has, or seeks to have, a performance-based relationship

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • that a business operation has been planned and implemented from initial research into feasibility of the business and completion of the plan, through to implementing the plan and commencing operations • the ability to evaluate the results of research and assess the likely viability and practicability of a business opportunity, taking into account the current business/market climate and resources available

Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Federal and regional government legislative requirements affecting business operations, especially in regard to Occupational Health and Safety (OHS), Equal Employment Opportunity (EEO), industrial relations and anti-discrimination • Technical or specialist skills relevant to the business operation • Financing options • Business systems and operations • Relevant marketing, management, sales and financial concepts • Methods for researching business opportunities • Principles of risk management relevant to the business • Methods of identifying relevant specialist services to complement the business • Forms and administrative systems • Services available and charges • Planning and control systems (sales, • Advertising and promotion, distribution and logistics • Financial recording systems • Legal rights and responsibilities • Record keeping duties • Operational factors relating to the business (provision of professional services, products)
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • Literacy skills to interpret legal requirements, company policies and procedures and immediate, day-to-day demands • Marketing skills • Business planning skills • Entrepreneurial skills • Problem-solving skills • OHS skills • Time management skills • Belief in services and products offered by the business • Communication skills including questioning, clarifying, reporting, and giving and receiving constructive feedback • Technical and analytical skills to interpret business documents, reports and financial statements and projections • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities • Problem solving skills to develop contingency plans • Using computers and software packages to record and manage data and to produce reports • Literacy skills to enable interpretation of business information, numeracy skills for data analysis to aid research • Research skills to identify a business opportunity and to conduct a feasibility study • Analytical skills to assess personal attributes and to identify business risks • Observation skills for identifying appropriate people, resources and to monitor work

Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level II	
Unit Title	Standardize and Sustain 3S
Unit Code	AGR FME2 17 0714
Unit Descriptor	This unit of competence covers the knowledge, skills and attitudes required by worker to standardize and sustain 3S to his/her workplace. It covers responsibility for the day- to-day operations of the workplace and ensuring that continuous improvements of Kaizen elements are initiated and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	<p>1.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>1.2 Job specifications are read and interpreted following working manual.</p> <p>1.3 OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>1.4 Safety equipment and tools are identified and checked for safe and effective operation.</p> <p>1.5 Tools and equipment are prepared and used to implement 3S.</p>
2. Standardize 3S.	<p>2.1 Plan is prepared and used to standardize 3S activities.</p> <p>2.2 Tools and techniques to standardize 3S are prepared and implemented based on relevant procedures.</p> <p>2.3 Checklists are followed for standardize activities and reported to relevant personnel.</p> <p>2.4 The workplace is kept to the specified standard.</p> <p>2.5 Problems are avoided by standardizing activities.</p>
3. Sustain 3S.	<p>3.1 Plan is prepared and followed to standardize 3S activities.</p> <p>3.2 Tools and techniques to sustain 3S are discussed, prepared and implemented based on relevant procedures.</p> <p>3.3 Workplace is inspected regularly for compliance to specified standard and sustainability of 3S techniques.</p> <p>3.4 Workplace is cleaned up after completion of job and before commencing next job or end of shift.</p> <p>3.5 Situations are identified where compliance to standards is unlikely and actions specified in procedures are taken.</p> <p>3.6 Improvements are recommended to lift the level of compliance in the workplace.</p> <p>3.7 Checklists are followed to sustain activities and reported to relevant personnel.</p> <p>3.8 Problems are avoided by sustaining activities.</p>

Variable	Range		
OHS requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances. • Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices. • Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization. • Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation. 		
Safety equipment and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • dust masks / goggles • glove • working cloth • first aid • safety shoes 		
Tools and equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • paint • hook • sticker • signboard • nails • shelves • chip wood • sponge • broom • pencil • shadow board/ tools board 		
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S Job Cycle Charts • Visual 5S • The Five Minute 5S • Standardization level checklist • 5S checklist • The five Whys and one How approach(5W1H) • Suspension • Incorporation • Use Elimination 		
Relevant procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Assign 3S responsibilities • Integrate 3S duties into regular work duties 		
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	<ul style="list-style-type: none"> • Check on 3S maintenance level • OHS measures such as signage, symbols / coding and labeling of workplace and equipment • Creating conditions to sustain your plans • Roles in implementation
Reporting	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • verbal responses • data entry into enterprise database • brief written reports using enterprise report formats
Relevant personnel	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • supervisors, managers and quality managers • administrative, laboratory and production personnel • internal/external contractors, customers and suppliers
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S slogans • 5S posters • 5S photo exhibits and storyboards • 5S newsletter • 5S maps • 5S pocket manuals • 5S department/benchmarking tours • 5S months • 5S audit • Awarding system • Big cleaning day • Patrolling system may include: <ul style="list-style-type: none"> ➢ Top management Patrol ➢ 5S Committee members and Promotion office Patrol ➢ Mutual patrol ➢ Self-patrol ➢ Checklist patrol ➢ Camera patrol

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Discuss the relationship between Kaizen elements. • Standardize and sustain 3S activities by applying appropriate tools and techniques.
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Elements of Kaizen • Ways to improve Kaizen elements • Benefits of improving kaizen elements • Relationship between Kaizen elements • The fourth pillar of 5S • Benefits of standardizing and sustaining 3S • Procedures for standardizing and sustaining 3S activities • Tools and techniques to sustain 3S • Relevant OHS and environment requirements • Plan and report • Method of communication

Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • improving Kaizen elements by applying 5S • standardizing and sustaining procedures and techniques to avoid problems • technical drawing • procedures to standardizing 3S activities • analyzing and preparing shop layout of the workplace • standardizing and sustaining checklists • preparing and implementing tools and techniques to sustain 3S • working with others • reading and interpreting documents • observing situations • solving problems by applying 5S • communication skills • preparing labels, slogans, etc. • gathering evidence by using different means • using Kaizen board properly in accordance the procedure • reporting activities and results using report formats
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

NTQF Level III

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Machinery and Equipment
Unit Code	AGR FME3 01 0714
Unit Descriptor	This unit covers the process of maintaining and operating machinery and equipment and defines the standard required to: carry out pre-operational checks and maintenance and report defects if necessary; secure attachments according to manufacturer's directions; operate machinery in a safe and controlled manner; follow procedures to minimise environmental impacts; implement shut-down procedures and store machinery and equipment; record maintenance and operation details. This unit applies to workers in agriculture, horticulture and land management who operate machinery and equipment for the enterprise. The unit is likely to be carried out under limited supervision with checking only related to overall progress.

Elements	Performance Criteria
1. Prepare machinery and equipment for use	<p>1.1 Machine and equipment appropriate to job requirements are selected and confirmed against a work plan.</p> <p>1.2 Routine pre-operational checks of machinery and equipment are carried out to manufacturer's specifications and enterprise requirements.</p> <p>1.3 Equipment is securely attached and calibrated for operation to manufacturer's specifications.</p> <p>1.4 Faulty machinery and equipment are identified, safety tagged, and reported to supervisor according to enterprise requirements.</p> <p>1.5 Occupational Health and Safety (OHS) hazards are identified, risks assessed and risk controls are implemented.</p>
2. Operate machinery and equipment	<p>2.1 Machinery and equipment are operated in a safe and controlled manner, and monitored for performance and efficiency.</p> <p>2.2 Risk to self, others and the environment are recognised and minimised according to enterprise and OHS requirements.</p> <p>2.3 Personal Protective Equipment (PPE) is selected, used and maintained according to procedures.</p> <p>2.4 Environmental implications associated with machinery operation are identified, assessed and taken into account.</p>
3. Check and complete machinery and equipment operation	<p>3.1 Machinery and equipment shut-down procedures are carried out to manufacturer's specifications and enterprise requirements.</p> <p>3.2 Machinery and equipment operational records are maintained according to enterprise requirements.</p>

	<p>3.3 Machinery and equipment damage, malfunctions or irregular performance are recorded and/or reported according to enterprise requirements.</p> <p>3.4 Machinery and equipment are cleaned, secured and stored according to manufacturer's specifications and enterprise requirements.</p>
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Variable	Range
Machinery and equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • hydraulic equipment • stationary engines • spraying equipment • mulching and chipping equipment • powered trailers and three point linkage equipment • excludes chainsaws, tractors, vehicles and earth moving equipment
Routine pre-operational checks	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • oils and water level • tyre pressure • couplings • loose bolts and nuts • wear and tear of body and components
Occupational Health and Safety (OHS) hazards	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running • unprotected moveable parts • electricity and water, • toxic substances • damaged packing material or containers • broken or damaged equipment • flammable materials and fire hazards • lifting practices • stumps and logs in the soil or covered by debris • crash with tractors/trucks • operating beyond own ability or negligence
OHS requirements	<p>are to be in accordance with applicable legislation and regulations and organizational safety policies and procedures and may include:</p> <ul style="list-style-type: none"> • personal protective equipment and clothing • workplace environment and safety, safety equipment • enterprise first aid and first aid equipment • hazard and risk control and hazardous materials and substances electrical safety • elimination of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures • use of tooling and equipment

	<ul style="list-style-type: none"> • handling of material • use of fire fighting equipment
Personal Protective Equipment (PPE)	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • carry out pre-operational checks and maintenance and report defects if necessary • secure attachments according to manufacturer's directions • operate machinery in a safe and controlled manner • follow procedures to minimise environmental impacts • implement shut-down procedures and store machinery and equipment • record maintenance and operation details • evidence records must include details of the machinery and equipment that the candidate was assessed on
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • manufacturers specifications for servicing of machinery and equipment • operating principles and operating methods for machinery and equipment • principles of weight distribution with regard to load shifting and machinery movement • procedures for cleaning, securing and storing machinery, equipment and materials • potential risks and hazards associated with the operation of machinery and equipment • use of hazardous substances • environmental impacts and minimisation measures associated with the operation of machinery and equipment • OHS and environmental legislation, regulations and Codes of Practice • relevant legislation, regulations and Codes of Practice with regard to licensing, roads and traffic requirements
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify hazards and implement safe operating procedures • complete pre-operational checks • recognise and report defects • operate machinery and equipment to industry standards • demonstrate safe and environmentally responsible workplace practices • read and interpret manufacturer's specifications, work and maintenance plans, and Material Safety Data Sheets (MSDSs) • interpret and apply instructions, communicate with work team and supervisor, record and report equipment faults, workplace hazards, and accidents • measure and calculate volumes, consumption and servicing requirements

	<ul style="list-style-type: none"> • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Specialised Machinery and Equipment
Unit Code	AGR FME3 02 0714
Unit Descriptor	This unit covers the operation of specialised machinery and equipment and defines the standard required to: prepare and operate the machinery in accordance with manufacturer's specifications; operate the machinery in a safe, efficient and controlled manner; conduct pre and post operational checks; perform minor maintenance and fault finding; record work activities. This unit applies to workers in agriculture, horticulture and land management who operate specialised machinery and equipment for the enterprise. A high level of individual responsibility is involved, depending on the level and nature of risk involved and the project.

Elements	Performance Criteria
1. Select and prepare specialised machinery and equipment for use	<p>1.1 Specialised machinery and equipment are selected and prepared to job requirements and confirmed against work plan.</p> <p>1.2 Routine pre-operational checks of specialised machinery and equipment are completed to manufacturer's specifications and enterprise requirements.</p> <p>1.3 Occupational Health and Safety (OHS) hazards are identified, risks assessed and risk controls implemented.</p>
2. Operate specialised machinery and equipment	<p>2.1 Machinery and equipment are operated in a safe and controlled manner and monitored for performance and efficiency.</p> <p>2.2 Risks to self, others and the environment are anticipated and minimisation strategies implemented accordingly.</p> <p>2.3 Personal Protective Equipment (PPE) is selected, used and maintained according to procedures.</p> <p>2.4 Environmental implications associated with machinery operation are identified, assessed and reported to the supervisor.</p>
3. Complete and report on specialised machinery and equipment operation	<p>3.1 Shut-down procedures for specialised machinery and equipment are completed to manufacturer's specifications and enterprise requirements.</p> <p>3.2 Specialised machinery and equipment operational records are completed and maintained according to enterprise requirements.</p> <p>3.3 Malfunctions, faults, irregular performance and damage to specialised machinery and equipment are detailed and reported according to enterprise requirements.</p> <p>3.4 Specialised machinery and equipment are cleaned, secured and stored according to OHS and enterprise requirements.</p>

Variable	Range
Machinery and equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • feed mixers • specialised turf equipment • specialised nursery equipment • livestock feeding systems • filtering and pumping equipment • poultry performance monitoring equipment • fertilising application • grain handling equipment
Occupational Health and Safety (OHS) hazards	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • servicing while machine is running • unprotected moveable parts • electricity and water • toxic substances • damaged packing material or containers • broken or damaged equipment • flammable materials and fire hazards • lifting practices
Personal Protective Equipment (PPE)	is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • prepare and operate the machinery in accordance with manufacturer specifications • operate the machinery in a safe, efficient and controlled manner • conduct pre and post operational checks • perform minor maintenance and fault finding • record work activities • evidence records must include a description of the machinery and equipment that the candidate was assessed
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • pre-operational checks • machinery operation techniques • operator level servicing • shutdown • emergency procedures • basic diagnostic techniques • equipment characteristics, technical capabilities and limitations • components and controls features and functions • OHS and environmental legislation, Codes of Practice and enterprise requirements • licensing requirements for machinery

Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe work procedures • select the appropriate machinery and equipment for the work plan • determine and check operating methods with management • carry out pre-operational checks on machinery • examine faults or breakdowns and specify repairs • use machinery or equipment in a safe and controlled manner to perform specific tasks by utilising the various components, controls and features • maintain and monitor performance and maintenance records • use environmentally responsible practices for operation of machinery and equipment, and to dispose of used oils and machinery parts • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Undertake Preparation of Land for Agricultural Crop Production
Unit Code	AGR FME3 03 0714
Unit Descriptor	This unit covers the process of preparing land for agricultural crop production and defines the standard required to: interpret production/planting plans; produce standards, quality specifications and work procedure documents; measure materials and site plan specifications; service, operate, adjust and calibrate cultivation equipment safely; and complete pre-and post-operational checks on tools, vehicles and equipment. This unit applies to farm workers operating under limited supervision from others with checking only related to overall progress. Preparing land for crop production is usually done within established routines, methods and procedures. Some discretion and judgement are required in the selection of equipment and materials, organisation of work and services. The outcomes should be achieved within specified timelines.

Elements	Performance Criteria
1. Prepare for cultivation	<p>1.1 Requirements for the work to be undertaken are interpreted from the planting plan and confirmed with the manager.</p> <p>1.2 The method and order of cultivation are identified and interpreted from the planting plan.</p> <p>1.3 Occupational Health and Safety (OHS) hazards are identified; risks assessed and suitable controls implemented.</p> <p>1.4 Suitable Personal Protective Equipment is selected, used and maintained.</p> <p>1.5 Environmental implications of cultivating the site are identified, likely outcomes assessed and, if necessary, responsible action is taken.</p>
2. Prepare the cultivating equipment	<p>2.1 Machinery and equipment required for cultivation are selected according to the planting plan and organisation guidelines.</p> <p>2.2 Machinery and equipment are serviced, adjusted for the conditions and worn parts replaced to ensure reliability during cultivation.</p> <p>2.3 All containers, leftover fluids, waste and debris from the maintenance and servicing work are disposed of safely and appropriately.</p> <p>2.4 All maintenance and servicing are documented according to the requirements of the organisation's record keeping system.</p>
3. Cultivate soil	<p>3.1 Previous crop or land clearance debris is removed, incorporated or burnt according to the organisation's guidelines.</p>

	<p>3.2 The cultivation plan is followed and completed for each paddock.</p> <p>3.3 OHS hazards are identified, risks assessed and suitable controls implemented.</p> <p>3.4 Machinery and equipment are operated in a safe, effective and efficient manner and at speeds to suit the conditions.</p> <p>3.5 The quality of cultivation is maximised by continually checking and adjusting the vehicles and equipment as necessary.</p> <p>3.6 All timelines, resource and quality requirements of the planting plan are met.</p>
4. Prepare site for planting	<p>4.1 The planting layout and soil profiles are completed as required by the planting plan.</p> <p>4.2 Weed and pest control measures are taken as required by the planting plan.</p> <p>4.3 Fertilisers, ameliorants, and/or other pre-planting treatments are applied as required by the planting plan.</p>
5. Complete land preparation operations	<p>5.1 Equipment is cleaned according to manufacturer specifications, organisational procedures and regulations.</p> <p>5.2 Machinery and equipment are cleaned and stored to minimise damage according to manufacturer specifications, organisational procedures and regulations.</p> <p>5.3 All containers, leftover fluids, waste and debris are disposed of safely and appropriately from the cleaning and maintenance work.</p> <p>5.4 All required records and documentation are completed accurately and promptly according to organisational requirements.</p>

Variable	Range
Cultivation	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • slashing, trash chopping • ripping or subsoiling • ploughing • harrowing, ridging • soil treatment
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • broken or damaged equipment, • servicing while engine is running • working under machines not secured • unprotected moveable parts • electricity and water, • toxic substances,

	<ul style="list-style-type: none"> • damaged packing material or containers, • flammable materials and fire hazards, • lifting practices, • stumps and logs in the soil or covered by debris • crash with tractors/trucks • uneven terrain, • canals, ditches, embankments
Personal Protective Equipment	is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Environmental implications	<p>may include:</p> <ul style="list-style-type: none"> • waste management • pollution • noise • dust • clean-up management
Machinery and equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • ploughs, harrows, cultivators(chisel, rotary, spring) • soil ameliorants and fertilizer spreaders
Preparation practices	<p>May include:</p> <ul style="list-style-type: none"> • land preparation equipment and soil pre-planting treatments used in commercial cropping for the range of crops, including: <ul style="list-style-type: none"> ➤ wheat and coarse grains ➤ cotton ➤ grain legumes ➤ oilseeds ➤ sugar ➤ temperate pastures and tropical pastures

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • interpret production/planting plans, produce standards, quality specifications and work procedure documents • measure materials and site plan specifications • service, operate, adjust and calibrate cultivation equipment safely • complete pre- and post-operational checks on tools, vehicles and equipment
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • methods of cultivating a range of soil types • environmental issues of cultivating soil for planting, such as drainage and irrigation systems, soil amelioration and waste disposal procedures • a range of pre-planting treatments, their purpose and method of application • operation and maintenance of planting equipment • OHS guidelines, procedures and principles, including manual handling and exposure to hazardous substances
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • interpret production/planting plans, produce standards, quality specifications and work procedure documents

	<ul style="list-style-type: none"> • measure materials and site plan specifications • operate, adjust and calibrate cultivation equipment safely • complete pre- and post-operational checks on tools, vehicles and equipment • perform routine safety, service and maintenance procedures on tools, cultivator and equipment • read and interpret manufacturer specifications, work and maintenance plans, and Material Safety Data Sheets (MSDS) • interpret and apply task instructions • communicate with work team and supervisor • record and report faults, workplace hazards and accidents • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Broadcast Sowing Machinery and Equipment
Unit Code	AGR FME3 04 0714
Unit Descriptor	This unit covers the process of operating sowing machinery and equipment and defines the standard required to: conduct pre and post operational checks; operate sowing machinery and equipment in a safe, efficient and controlled manner; perform minor maintenance and fault finding; record work activities. This unit requires a high level of individual responsibility for the care and efficient operation of the equipment, the accurate seed placement required for optimal production, and the operating hazards involved.

Elements	Performance Criteria
1. Prepare machinery for use	<p>1.1 Appropriate Personnel Protective Equipment is selected and used in accordance to work requirements.</p> <p>1.2 Routine pre-operational checks and equipment cleaning tasks are conducted as per organization procedures.</p> <p>1.3 Damaged or worn components are replaced and/or reported.</p> <p>1.4 Potential Occupational Health and Safety (OHS) hazards are identified and reported in accordance to workplace procedures.</p> <p>1.5 Potential environmental implications are identified and reported in accordance to workplace requirements.</p> <p>1.6 Ancillary equipment is attached and checked for correct operation in accordance to manufacturer's instruction.</p>
2. Operate machinery and equipment	<p>2.1 Machinery and equipment are operated in a safe, efficient and controlled manner.</p> <p>2.2 Machinery is operated in accordance with task requirements, conditions and manufacturers operating guidelines.</p> <p>2.3 Machinery performance and efficiency are monitored and adjustments made as required.</p> <p>2.4 Potential risks to self, others and the environment are assessed and minimised</p>
3. Complete work	<p>3.1 Shut down procedures are followed in accordance to manufacturer's instruction.</p> <p>3.2 Operational records are documented and completed as per workplace manuals.</p> <p>3.3 Routine operator servicing measures are carried in accordance to manufacturer's instruction and workplace guideline.</p> <p>3.4 Malfunctions, faults, irregular performance or damage are identified and reported in accordance to workplace guideline.</p>

Variable	Range
Personnel Protective Equipment	Is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Routine pre-operational checks	May include but not limited to: <ul style="list-style-type: none"> oils, fuel and water levels electrical system and control gauges tyre pressure loose bolts and nuts belts and chains tension coupling security lubrication of movable parts hopper lids torn and broken parts spacing and calibration of equipment
Occupational Health and Safety (OHS) hazards	May result from but not limited to: <ul style="list-style-type: none"> sharp cutting tooling and instruments, torn or improper use personal protective equipments worn out repair tools servicing while engine is running working under machines not secured unprotected moveable parts electricity and water, toxic substances, damaged packing material or containers, broken or damaged equipment, flammable materials and fire hazards, lifting practices, stumps and logs in the soil or covered by debris spillages, waste and debris especially on floors crash with tractors/trucks
Types of crops to be sown	May include: <ul style="list-style-type: none"> grains non-permanent horticultural crops It does not cover row crops

Evidence Guide	
Critical Aspects of Competence	Demonstrate knowledge and skills to: <ul style="list-style-type: none"> conduct pre and post operational tasks operate sowing machinery and equipment in a safe, efficient and controlled manner
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> manufacturer's requirements and/or workplace requirements for: <ul style="list-style-type: none"> pre-operational checks machinery operation techniques operator level servicing shutdown emergency procedures basic diagnostic techniques

	<ul style="list-style-type: none"> ➤ equipment characteristics, technical capabilities and limitations ➤ components and controls features and functions
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe work procedures • conduct pre-operational checks • operate machinery in a safe, efficient and controlled manner • perform operator maintenance tasks • attach and uncouple associated equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Row Crop Planting and Seeding Machinery and Equipment
Unit Code	AGR FME3 05 0714
Unit Descriptor	This unit covers the operation of row crop planting and seeding machinery and equipment and defines the standard required to: conduct pre and post operational checks; operate planting and seeding machinery and equipment in a safe, efficient and controlled manner; perform minor maintenance and fault finding; record work activities. This unit applies to workers in production horticulture and agriculture and requires a high level of individual responsibility for the care and efficient operation of the equipment, the accurate seed or plant placement required for optimal production, and the potential operating hazards involved.

Elements	Performance Criteria
1. Prepare machinery for use	<p>1.1 Occupational Health and Safety (OHS) hazards for working with machinery are identified, risks assessed and risk controls implemented.</p> <p>1.2 Appropriate Personnel Protective Equipment is selected, used and maintained.</p> <p>1.3 Routine pre-operational checks and housekeeping tasks are conducted.</p> <p>1.4 Damaged or worn components are replaced and/or reported.</p> <p>1.5 Ancillary equipment and check for correct operation are attached.</p>
2. Operate machinery and equipment	<p>2.1 Machinery and equipment are operated in a safe, efficient and controlled manner.</p> <p>2.2 Machinery is operated in accordance with task requirements, conditions and manufacturer's operating guidelines.</p> <p>2.3 Machinery performance and efficiency are monitored and adjustments made as required.</p> <p>2.4 Moisture and level of seeds in hoppers, gears, sprockets, seed dropping hoses, belts and chains tensions are regularly monitored and actions taken promptly</p> <p>2.5 Row spacing and units assembly are monitored and remedial action is taken</p> <p>2.6 PTO speed is consistently maintained according to attachment manufacturer's instruction</p> <p>2.7 Potential environmental risks of operating sowing equipment are assessed and minimised.</p>
3. Complete work	<p>3.1 Shut down procedures are followed according to manufacturer's instruction.</p>

	<p>3.2 Operational records are completed according to enterprise requirements.</p> <p>3.3 Routine operator servicing is carried out according to operator's manual.</p> <p>3.4 Malfunctions, faults, irregular performance or damage are identified and reported.</p>
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Variable	Range
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running/working under machines • unprotected moveable parts • electricity and water, • toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • lifting practices, • stumps and logs in the soil or covered by debris • spillages, waste and debris especially on floors • crash with tractors/trucks
Personnel Protective Equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Pre-operational checks	<p>May include:</p> <ul style="list-style-type: none"> • oils, fuel and water levels • electrical system and control gauges • tyre pressure • loose bolts and nuts • belts and chains tensions • coupling security • lubrication of movable parts • hopper lids • torn and broken parts • spacing and calibration of equipment
Type of machinery	<p>May include:</p> <ul style="list-style-type: none"> • machinery and equipment used in establishing row planted crops • seed dillers • row planters and fertilizer spreaders

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • conduct pre and post operational checks • operate planting and seeding machinery and equipment in a safe, efficient and controlled manner • perform minor maintenance and fault finding • record work activities

Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • manufacturer's requirements and/or workplace requirements for: <ul style="list-style-type: none"> ➤ pre-operational checks ➤ machinery operation techniques ➤ operator level servicing ➤ shutdown procedures ➤ emergency procedures ➤ precision agriculture and controlled traffic ➤ basic diagnostic techniques ➤ equipment characteristics, technical capabilities and limitations ➤ components and controls features and functions ➤ OHS legislation and requirements for operators ➤ risks to environment from operating sowing equipment for row crops
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe work procedures • conduct pre-operational checks • operate machinery in a safe, efficient and controlled manner • follow planting requirements • perform operator maintenance tasks • attach and uncouple associated equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Undertake Agricultural Crop Harvesting Activities
Unit Code	AGR FME3 06 0714
Unit Descriptor	This unit covers the process of harvesting agricultural crops and defines the standard required to: complete pre and post operational checks on tools, harvesting machinery and equipment; perform routine safety; service and maintenance procedures on tools, harvesting machinery and equipment; handle and manoeuvre harvesting equipment; monitor efficiency of harvesting equipment and make adjustments to height and other settings and transport; clean and store harvesting equipment. This unit applies to workers on cropping enterprises or in harvesting contract teams and requires the ability to work as part of a team following set routines, methods and procedures. Some discretion and judgment is required in the maintenance and operation of equipment and machinery. The outcomes must be achieved at a rate that maintains the progress of the harvesting operation.

Elements	Performance Criteria
1. Prepare to harvest agricultural crops	<p>1.1 Requirements for the work to be undertaken, method and order of harvesting are interpreted from the harvest program and confirmed with the supervisor.</p> <p>1.2 Occupational Health and Safety (OHS) hazards are identified, risks assessed and risk controls implemented for the harvesting operation.</p> <p>1.3 Personal protective equipment is selected, used and maintained.</p> <p>1.4 The environmental impacts of harvesting the crop are identified and action is taken where required.</p> <p>1.5 Windrowing/swathing is completed to the standard required.</p> <p>1.6 Crop is sampled for moisture content to assess timing of harvest.</p> <p>1.7 The hygiene standards for the crop and the paddock are identified from the harvest strategy and/or the crop storage plan.</p>
2. Prepare the harvesting equipment	<p>2.1 Harvesting machinery and other equipment are cleaned of pests and other contaminants to maintain crop and paddock hygiene standards, as required by the harvest strategy.</p> <p>2.2 All machinery and equipment are serviced, assessed for reliability, adjusted for harvesting conditions and appropriate parts are replaced to ensure reliability during the harvest.</p> <p>2.3 All containers, leftover fluids, waste and debris from the maintenance and servicing work are disposed of safely and in line with environmental guidelines.</p>

	2.4 All maintenance and servicing are documented according to the requirements of the organisation.
3. Harvest crops	<p>3.1 The harvest strategy is followed and completed for each paddock.</p> <p>3.2 Personal protective equipment is selected, used and maintained for harvesting.</p> <p>3.3 Harvesting machinery and ancillary equipment are operated in a safe manner and at speeds to suit crop conditions.</p> <p>3.4 Cleanliness and purity of the harvested product are maximised by maintaining the hygiene of all surfaces that come into contact with the crop.</p> <p>3.5 The quality of product is optimised by continually checking and, where necessary, adjusting the harvester and ancillary equipment, including their height and other settings.</p> <p>3.6 Fire prevention measures are taken as outlined and described in the harvest strategy.</p>
4. Complete harvesting operations	<p>4.1 Equipment is cleaned in accordance with manufacturer's specifications, organisational procedures and regulations.</p> <p>4.2 Attachments and other ancillary equipment are cleaned and stored to minimise damage and to maximise hygiene according to manufacturer's specifications, organisational procedures and regulations.</p> <p>4.3 Insecticides are applied as required by the organisation and the harvest strategy.</p> <p>4.4 All containers, leftover fluids, waste and debris from the maintenance and servicing work are disposed of safely and according to environmental requirements.</p> <p>4.5 Harvesting equipment is moved between sites and on public roads in compliance with legislation including hygiene requirements.</p> <p>4.6 All required records and documentation are completed accurately and promptly in accordance with enterprise requirements.</p>

Variable	Range
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • header, blades • Torn or improper use personal protective equipments • Worn out repair tools • unprotected moveable parts • electricity and water, • toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • Stumps and logs in the soil or covered by debris

	<ul style="list-style-type: none"> • crash with tractors/trucks • overheating
Personal protective equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Harvesting machinery	May include: <ul style="list-style-type: none"> • self propelled combine harvester
Other equipment	May include: <ul style="list-style-type: none"> • trailers • sheller • PTO operated or engine powered threshers • trucks
Harvested crops	May include: <ul style="list-style-type: none"> • wheat and coarse grains • cotton • grain legumes • oilseeds • sugar • temperate pastures • tropical pastures

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • complete pre and post operational checks on tools, harvesting machinery and equipment • perform routine safety, service and maintenance procedures on tools, harvesting machinery and equipment • sample crops to assess moisture content and maturity/ripeness of the crop • handle and manoeuvre harvesting equipment • monitor efficiency of harvesting equipment and make adjustments to height and other settings • transport, clean and store harvesting equipment
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • appropriate legislative requirements, manufacturer's instructions and organisation procedures/instructions • pre-operational and safety checks, servicing and maintenance procedures for tools and equipment • potential hazards and safe operating procedures for basic tools and equipment • safe operating procedures and standards for harvesting and ancillary equipment • grain quality and the impact of harvesting practices • general machine maintenance procedures • machinery operating principles and operating methods • environmental impacts associated with the operation of machinery and equipment in a harvesting context • organisation recording and reporting procedures • pests and signs of pest infestation in the crop • hygiene procedures for harvesting machinery and equipment

	<ul style="list-style-type: none"> • organisation moisture and hygiene requirements for the crop and equipment that comes into contact with the crop • requirements for harvesting machinery and equipment transport • fire prevention strategies
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • handle and manoeuvre harvesting equipment • operate crop harvesting machinery and equipment • implement procedures for seed handling and hygiene • identify hazards and implement OHS procedures for all harvest tasks • complete pre- and post-operational checks on tools, harvesting machinery and equipment • perform routine, service and maintenance procedures on tools, harvesting machinery and equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Broadcast and Row Crop Harvest Machinery and Equipment
Unit Code	AGR FME3 07 0714
Unit Descriptor	This unit covers the process of operating broadcast or row crop harvesting machinery and equipment and defines the standard required to: pre and post operational check operate machinery and equipment in a safe, efficient and controlled manner; perform minor maintenance and fault finding; record work activities. This unit requires a high level of individual responsibility for the care and efficient operation of the equipment, the quality of output harvested, and the potential operating hazards involved.

Elements	Performance Criteria
1. Prepare machinery for use	<p>1.1 Appropriate Personnel Protective Equipment is selected and used.</p> <p>1.2 Routine pre-operational checks and housekeeping tasks are conducted.</p> <p>1.3 Damaged or worn components are replaced and/or reported.</p> <p>1.4 Potential Occupational Health and Safety (OHS) hazards are identified and reported.</p> <p>1.5 Potential environmental implications are identified and reported.</p> <p>1.6 Ancillary equipment is attached and checked for correct operation.</p>
2. Operate machinery and equipment	<p>2.1 Machinery and equipment are operated in a safe, efficient and controlled manner.</p> <p>2.2 Machinery is operated in accordance with task requirements, conditions and manufacturers operating guidelines.</p> <p>2.3 Machinery performance and efficiency are monitored and adjustments made, as required.</p> <p>2.4 Potential risks are assessed and minimized to self, others and the environment.</p>
3. Complete work	<p>3.1 Shut down procedures are followed.</p> <p>3.2 Operational records are completed.</p> <p>3.3 Routine operator servicing is carried out.</p> <p>3.4 Malfunctions, faults, irregular performance or damage are identified and reported.</p>

Variable	Range
Personnel Protective Equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices

Routine pre-operational checks	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • oils, fuel and water levels • leakage of oils and fuel • electrical system and control gauges • tyre pressure • loose bolts and nuts • belts and chains tension • reel and auger coupling security • lubrication of movable parts • torn and broken parts • guard cover
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • header, blades • torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running • working under machines not secured • unprotected moveable parts • electricity and water • toxic substances • damaged packing material or containers • broken or damaged equipment • flammable materials and fire hazards • lifting practices • stumps and logs in the soil or covered by debris • crash with tractors/trucks
Types of machinery and equipment	<p>May include:</p> <ul style="list-style-type: none"> • machinery and equipment used in harvesting broadcast or row crops

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • conduct pre and post operational checks • operate machinery and equipment in a safe, efficient and controlled manner • perform minor maintenance and fault finding • record work activities
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • manufacturer's requirements and/or workplace requirements for: <ul style="list-style-type: none"> ➤ pre-operational checks ➤ machinery operation techniques ➤ operator level servicing ➤ shutdown ➤ emergency procedures ➤ basic diagnostic techniques ➤ equipment characteristics, technical capabilities and limitations ➤ components and controls features and functions

Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • conduct pre-operational checks • operate machinery in a safe, efficient and controlled manner • perform operator maintenance tasks • attach and uncouple associated equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Cane Harvester
Unit Code	AGR FME3 08 0714
Unit Descriptor	This unit covers the process of preparing and operating a cane harvester in the sugar cane production industry and defines the standard required to: conduct pre-start and shut-down procedures; communicate and co-operate with other personnel such as haul-out drivers; control cane spillage; demonstrate emergency driving procedures; effectively sterilise the harvester to prevent cross-property contamination; maintain operational records. This unit applies to correctly setting-up, calibrating and operating a cane harvester to maximise sustainable cane production. The work is likely to be carried out under routine supervision within enterprise guidelines.

Elements	Performance Criteria
1. Prepare a cane harvester for operation	<p>1.1 Routine pre-operational checks of cane harvester are completed to manufacturer's specifications and enterprise requirements.</p> <p>1.2 Cabin drill is carried out according to enterprise instructions and safety routines.</p> <p>1.3 Potential and existing hazards in the workplace are recognised; risks assessed and controlled according to Occupational Health and Safety (OHS) requirements.</p> <p>1.4 Suitable Personal Protective Equipment is selected, used and maintained according to OHS requirements.</p> <p>1.5 Crop class, variety and field for harvest are correctly located and selected.</p>
2. Carry out cane harvesting	<p>2.1 Harvester is set and operated in a safe, controlled and correct manner and monitored for performance and efficiency.</p> <p>2.2 Harvester is operated in co-ordination with haul out vehicles and other associated harvesting equipment.</p> <p>2.3 Cane is harvested in a productive, safe and controlled manner and correctly consigned.</p> <p>2.4 Risks to self, others and the environment are anticipated and minimisation strategies implemented accordingly.</p> <p>2.5 Environmental implications associated with cane harvesting are identified, assessed and reported to the supervisor.</p>
3. Complete cane harvesting operations	<p>3.1 Shut-down procedures for cane harvester are completed to manufacturer's specifications and enterprise requirements.</p> <p>3.2 Harvester is sterilised at scheduled times according to operators manual and enterprise requirements.</p>

	<p>3.3 Records are completed and maintained according to enterprise requirements.</p> <p>3.4 Malfunctions, faults, irregular performance and damage to cane harvester are identified, detailed and reported according to enterprise requirements.</p> <p>3.5 Cane harvester is cleaned, secured and stored according to OHS and enterprise requirements.</p>
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Variable	Range
Hazards	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • disturbance of services • solar radiation • dust • noise • through traffic • uneven surfaces and holes • moving machinery and machinery parts • overhead hazards including powerlines

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • conduct pre-start and shut-down procedures • communicate and co-operate with other personnel such as haul-out drivers • control cane spillage • demonstrate emergency driving procedures • effectively sterilise the harvester to prevent cross-property contamination • maintain operational records
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • components, controls and features of cane harvesters and their functions • operating principles and operating methods for cane harvesters • cane harvester processes and spillage minimisation techniques • legislative requirements with regard to licensing • harvest and haulage processes and procedures • principles of the safe removal of obstacles from harvesters and adjustment of harvester settings • OHS and environmental protection legislation, codes of practice and enterprise procedures • environmental impacts and minimisation measures
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe operating procedures • readily familiarise self with local conditions • perform routine safety, basic service and maintenance procedures on cane harvesters

	<ul style="list-style-type: none"> • demonstrate emergency operating procedures • obtain licenses and permits • demonstrate safe and environmentally responsible workplace practices • read and interpret property maps, operators manuals, manufacturers specifications, work and maintenance plans, and MSDS • communicate faults, malfunctions and workplace hazards, report and maintain operational records • comprehend and apply task instructions • measure and calculate volumes, feed rates, consumption and servicing requirements • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Chemical Application Machinery and Equipment
Unit Code	AGR FME3 09 0714
Unit Descriptor	This unit covers the process of operating chemical application machinery and equipment and defines the standard required to: prepare the machinery in accordance with manufacturer specifications; operate the machinery in a safe, efficient and controlled manner; conduct pre and post operational checks; perform minor maintenance and fault finding; record work activities. The operation of specialised liquid chemical and granular application machinery and equipment is likely to be carried out under limited supervision within enterprise guidelines. A high level of individual responsibility is involved to control risks to operators and other exposed workers and the environment, and to minimise the risk of residues levels being exceeded.

Elements	Performance Criteria
1. Prepare machinery for use	<p>1.1 Appropriate Personal Protective Equipment is selected and used.</p> <p>1.2 Routine pre-operational checks and housekeeping tasks are conducted.</p> <p>1.3 Damaged or worn components are replaced and/or reported.</p> <p>1.4 Potential Occupational Health and Safety (OHS) hazards are identified and reported.</p> <p>1.5 Potential environmental impacts are identified and reported.</p> <p>1.6 Equipment is calibrated/setup in accordance with spray/application plan.</p> <p>1.7 Ancillary equipment is attached and checked for correct operation.</p> <p>1.8 Pre-operational checks are undertaken and recorded.</p>
2. Operate machinery and equipment	<p>2.1 Safe operating procedures are observed and noted during the use of tools/ equipment in accordance with workplace guidelines</p> <p>2.2 Machinery and equipment are operated in a safe, efficient and controlled manner.</p> <p>2.3 Machinery is operated in accordance with task requirements, conditions and manufacturers operating guidelines.</p> <p>2.4 Machinery performance and efficiency are monitored and adjustments made as required.</p> <p>2.5 Meteorological conditions are monitored during application.</p> <p>2.6 Appropriate personal protective equipment is worn during operation and cleans up.</p>

	<p>2.7 Environmental requirements are observed and precautions implemented according to workplace and environmental protection regulation or guidelines</p> <p>2.8 Potential risks to self, others, product integrity and the environment are assessed and minimized.</p> <p>2.9 Emergency procedures are identified and followed as per organization's guideline.</p>
3. Complete work	<p>3.1 Shut down procedures are followed.</p> <p>3.2 Components are cleaned/ flushed in accordance with manufacturer's specifications and chemical label requirements.</p> <p>3.3 Operational records are completed in accordance with legislative and/or regulatory requirements.</p> <p>3.4 Routine operator servicing is carried out.</p> <p>3.5 Malfunctions, faults, irregular performance or damage are identified and reported.</p>

Variable	Range
Personal Protective Equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Routine pre-operational checks	<p>May include:</p> <ul style="list-style-type: none"> • oils and water level • tyre pressure • couplings • loose bolts, nuts and tightness of clamps • wear and tear of body and components • nozzle size , drop volume, and clogging • hose tear and wear • spray volume in the tank • pump pressure, • leakage of chemicals, oils and fuel • corrosion on pumps and agitator systems
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • chemical contact, burn or swallowing • working under machines not secured • unprotected moveable parts • toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • wrong spraying direction in relation to the wind, • stumps and logs in the soil or covered by debris • crash with tractors/trucks

Safe operating procedures	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> operational risk assessment and treatments associated with vehicular movement, toxic substances, chemical safety, machinery movement and operation, manual and mechanical lifting and shifting, working in proximity to others emergency shutdown and stopping of equipment, enterprise first aid requirements
Machinery and equipment	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> specialised liquid chemical and granular application machinery equipment used for crop protection and pest management
Environmental requirements	<p>may include:</p> <ul style="list-style-type: none"> waste management(disposal) pollution water source contamination wind drift clean-up management
Emergency procedures	<p>related to this unit are to include but may not be limited to:</p> <ul style="list-style-type: none"> emergency shutdown and stopping of equipment extinguishing fires enterprise first aid requirements and site evacuation

Evidence Guide			
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> prepare the machinery in accordance with manufacturer specifications operate the machinery in a safe, efficient and controlled manner conduct pre and post operational checks perform minor maintenance and fault finding record work activities 		
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> manufacturers specifications and/or workplace requirements for: <ul style="list-style-type: none"> pre-operational checks machinery operation techniques operator level servicing shutdown emergency procedures features and function of application equipment components: <ul style="list-style-type: none"> liquid spray - nozzles, tanks, agitation systems, pumps, filters, pressure regulation valves etc granular applicators/dusters - hoppers, flow control valves etc effect of meteorological conditions on chemical application equipment characteristics, technical capabilities and limitations basic diagnostic techniques equipment characteristics, technical capabilities and limitations components and controls features and functions 		
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	<ul style="list-style-type: none"> • environmental impacts including spray drift
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe work procedures • conduct pre-operational checks • calibration/set up of application components • operate machinery in a safe, efficient and controlled manner • perform operator maintenance tasks • attach and uncouple associated equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Precision Control Technology
Unit Code	AGR FME3 10 0714
Unit Descriptor	<p>This unit covers the operation of precision technology used in the control of specialised machinery and equipment and defines the standard required to: conduct pre- and post-operational checks; operate precision control technology; perform minor maintenance and fault finding; and record work activities.</p> <p>This unit is used to optimise specialised machinery performance. It is likely to be carried out under limited supervision within enterprise guidelines. A level of technical understanding is required to make best use of the equipment and recognise operating faults and anomalies.</p>

Elements	Performance Criteria
1. Prepare precision technology for use	<p>1.1 Routine pre-operational checks are completed in accordance manufacturer specifications.</p> <p>1.2 Minor routine servicing and housekeeping tasks are carried out and recorded.</p> <p>1.3 Occupational Health and Safety (OHS) hazards are identified and reported.</p> <p>1.4 Ancillary equipment is checked for correct operation.</p> <p>1.5 Data that complies with job specifications is checked.</p>
2. Use precision technology	<p>2.1 Technology is operated in accordance with task requirements, conditions and manufacturer operating guidelines.</p> <p>2.2 Activities are monitored to ensure that machinery is operating in an efficient and controlled manner and adjustments made as required.</p> <p>2.3 Potential risks to self, others and the environment are assessed and minimized during operation.</p>
3. Complete work	<p>3.1 Shutdown procedures are followed.</p> <p>3.2 Data and/or complete operational records are downloaded.</p> <p>3.3 Basic diagnostic procedures are performed.</p> <p>3.4 Malfunctions, faults and irregular performance are identified and reported.</p>

Variable	Range
Routine pre-operational checks	<p>May include:</p> <ul style="list-style-type: none"> • oils and water level • tyre pressure • couplings • loose bolts, nuts and tightness of clamps • wear and tear of body and components

	<ul style="list-style-type: none"> • nozzle size , drop volume, and clogging • hose tear and wear • spray volume in the tank • pump pressure, • leakage of chemicals, oils and fuel • corrosion on pumps and agitator systems
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • chemical contact, burn or swallowing • working under machines not secured • unprotected moveable parts • toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • wrong spraying direction in relation to the wind, • stumps and logs in the soil or covered by debris • crash with tractors/trucks
The types of machinery and equipment	<p>May include:</p> <ul style="list-style-type: none"> • on-board and fixed precision control technology

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • conduct pre- and post-operational checks • operate precision control technology • perform minor maintenance and fault finding • record work activities
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • manufacturer specifications and requirements for: <ul style="list-style-type: none"> ➢ pre-operational checks ➢ precision instrument controls, feature and functions ➢ minor servicing • uploading and downloading of data • basic diagnostic techniques • characteristics, technical capabilities and limitations of associated machinery and equipment • components and controls features and functions
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • conduct pre-operational checks • use technology to operate machinery in an efficient and controlled manner • perform routine maintenance tasks • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record information collected accurately and legibly, and select and apply procedures for a range of tasks

	<ul style="list-style-type: none"> • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Mobile Irrigation Machinery and Equipment
Unit Code	<u>AGR FME3 11 0714</u>
Unit Descriptor	This unit covers the process of operating mobile irrigation machinery and equipment and defines the standard required to: conduct pre and post operational checks; operate mobile irrigation machinery and equipment in a safe, efficient and controlled manner; perform minor maintenance and fault finding; record work activities. This unit requires a high level of individual responsibility for the care and efficient operation of the equipment, the need to meet plant water needs efficiently, and the potential operating hazards involved.

Elements	Performance Criteria
1. Prepare machinery for use	<p>1.1 Appropriate Personnel Protective Equipment is selected and used.</p> <p>1.2 Routine pre-operational checks and housekeeping tasks are conducted.</p> <p>1.3 Damaged or worn components are replaced and/or reported.</p> <p>1.4 Potential Occupational Health and Safety (OHS) hazards is identified and reported.</p> <p>1.5 Potential environmental implications are identified and reported.</p> <p>1.6 Ancillary equipment is attached and checked for correct operation.</p>
2. Operate machinery and equipment	<p>2.1 Machinery and equipment are operated in a safe, efficient and controlled manner.</p> <p>2.2 Machinery is operated in accordance with task requirements, conditions and manufacturers operating guidelines.</p> <p>2.3 Machinery performance and efficiency are monitored and adjustments made as required.</p> <p>2.4 Potential risks to self, others and the environment are assessed and minimized.</p>
3. Complete work	<p>3.1 Shut down procedures are followed.</p> <p>3.2 Operational records are completed.</p> <p>3.3 Routine operator servicing is carried out.</p> <p>3.4 Malfunctions, faults, irregular performance or damage are identified and reported.</p>

Variable	Range
Personnel Protective Equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
Occupational Health and Safety (OHS) hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • Worn out repair tools • unprotected moveable parts

	<ul style="list-style-type: none"> • broken or damaged equipment, • lifting practices, • Stumps and logs in the soil or covered by debris • crash with tractors/trucks
The types of machinery and equipment	May include lateral and centre pivot mobile irrigation machinery and equipment used for the irrigation of broad acre and horticultural crops.

Evidence Guide	
Critical Aspects of Competence	Demonstrate knowledge and skills to: <ul style="list-style-type: none"> • conduct pre and post operational checks • operate mobile irrigation machinery and equipment in a safe, efficient and controlled manner • perform minor maintenance and fault finding • record work activities
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • manufacturer's requirements and/or workplace requirements for: <ul style="list-style-type: none"> ➢ pre-operational checks and machinery operation techniques ➢ operator level servicing and shutdown ➢ emergency procedures and basic diagnostic techniques ➢ equipment characteristics, technical capabilities and limitations ➢ components and controls, features and functions
Underpinning Skills	Demonstrate skills of: <ul style="list-style-type: none"> • conduct pre-operational checks • operate machinery in a safe, efficient and controlled manner • perform operator maintenance tasks • attach and uncouple associated equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Land-forming Machinery and Equipment
Unit Code	<u>AGR FME3 12 0714</u>
Unit Descriptor	This unit covers the process of operating land forming machinery and equipment and defines the standard required to: operate land forming machinery and equipment in a safe, efficient and controlled manner; conduct pre and post operational checks; perform minor maintenance and fault finding; record work activities. Work is carried out with limited supervision and there is some requirement to make decisions and deal with contingencies. A level of technical understanding is required to use equipment for efficient land-forming operations which achieve the required environmental outcomes.

Elements	Performance Criteria
1. Prepare machinery for use	<p>1.1 Appropriate Personnel Protective Equipment is selected and used.</p> <p>1.2 Routine pre-operational checks and housekeeping tasks are conducted.</p> <p>1.3 Damaged or worn components are replaced and/or reported.</p> <p>1.4 Potential Occupational Health and Safety (OHS) hazards are identified and reported.</p> <p>1.5 Potential environmental implications are identified and reported.</p> <p>1.6 Ancillary equipment is attached and checked for correct operation.</p>
2. Operate machinery and equipment	<p>2.1 Machinery and equipment are operated in a safe, efficient and controlled manner.</p> <p>2.2 Machinery is operated in accordance with task requirements, conditions and manufacturers operating guidelines.</p> <p>2.3 Machinery performance and efficiency are monitored and adjustments are made as required.</p> <p>2.4 Potential risks to self, others and the environment are assessed and minimized.</p>
3. Complete work	<p>3.1 Shut down procedures are followed.</p> <p>3.2 Operational records are completed.</p> <p>3.3 Routine operator servicing is carried out.</p> <p>3.4 Malfunctions, faults, irregular performance or damage are identified and reported.</p>

Variable	Range
Personnel protective equipment	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices

Routine pre-operational checks	<p>May include</p> <ul style="list-style-type: none"> • Oils and water level • Tyre pressure • Couplings • Loose bolts and nuts • Wear and tear of body and components
Occupational Health and Safety (OHS) hazards	<p>May include</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • Torn or improper use personal protective equipments • Servicing while engine is running • Working under machines not secured • unprotected moveable parts • broken or damaged equipment,
Environmental implications	<p>may include:</p> <ul style="list-style-type: none"> • waste management • pollution • noise • dust • clean-up management
Types of machinery and equipment	used to reshape the surface of land to planned grades

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • operate land forming machinery and equipment in a safe, efficient and controlled manner • conduct pre and post operational checks • perform minor maintenance and fault finding • record work activities
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • manufacturer's requirements and/or workplace requirements for: <ul style="list-style-type: none"> ➤ pre-operational checks ➤ machinery operation techniques ➤ operator level servicing ➤ shutdown ➤ emergency procedures ➤ basic diagnostic techniques ➤ equipment characteristics, technical capabilities and limitations ➤ components and controls features and functions including precision controls ➤ general land forming concepts and practices including: <ul style="list-style-type: none"> ➤ contouring, surface drainage and erosion ➤ slope requirements ➤ survey and set out
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe operating procedures • conduct pre-operational checks • operate machinery in a safe, efficient and controlled manner

	<ul style="list-style-type: none"> • perform operator maintenance tasks • attach and uncouple associated equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Ground Spread Fertiliser and Soil Ameliorant
Unit Code	<u>AGR FME3 13 0714</u>
Unit Descriptor	This unit standard covers the process of spreading fertiliser and soil ameliorants according to environmentally sound practices to meet customer requirements and industry standards and defines required to: assess environmental and physical hazards that may be encountered when ground spreading and take appropriate action to minimise these risks; maintain and operate spreading equipment to meet industry standards for uniformity of application; maintain and operate spreading equipment to meet Occupational Health and Safety (OHS) requirements; apply fertiliser or soil ameliorants at rate agreed by customer to specified land area. This unit is carried out under limited or independently and follows established enterprise procedures.

Elements	Performance Criteria
1. Confirm customer requirements	<p>1.1 Confirmation is sought from customer that fertiliser or soil ameliorant products to be spread are those that were ordered.</p> <p>1.2 Verification is obtained from customer that technical specification of product is acceptable for job.</p> <p>1.3 Customer's written fertiliser order is confirmed with customer and documented to enable trace back to depot or factory if required.</p> <p>1.4 Agreement for spreading services is documented according to enterprise or industry codes of practice.</p>
2. Identify features of the target area	<p>2.1 Location and boundaries of area to be treated are identified, agreed with customer and recorded according to relevant industry codes of practice.</p> <p>2.2 Soil type and condition are assessed visually or advice is sought from customer.</p> <p>2.3 Environmentally sensitive areas are identified and operations planned to ensure minimum adverse impact and to comply with any required buffer zones.</p> <p>2.4 A feature that may present hazard to the operation is identified by inspection and by discussion with customer and appropriate action taken.</p> <p>2.5 Location of services and utilities are identified from customer advice or local maps, and proposed spreading operation is adjusted if required.</p> <p>2.6 Local weather and climate conditions are identified and taken into account when preparing to begin operations.</p>

3. Perform pre-spreading checks	<p>3.1 Rate of spreading is determined and buffer allowance is calculated.</p> <p>3.2 Before being moved onto site, machinery and equipment are confirmed to be clean of soil and/or plant material.</p> <p>3.3 Machinery and equipment are prepared according to enterprise procedures and manufacturer instructions to ensure they are serviceable and are set up and calibrated.</p>
4. Spread fertiliser	<p>4.1 Personal Protective Equipment (PPE) and clothing are selected and used by self and all personnel involved in spreading tasks.</p> <p>4.2 Fertiliser or soil ameliorant is applied in a manner that complies with guidelines on buffer zones, to minimise run-off into waterways and drains.</p> <p>4.3 Weather and other conditions are monitored to ensure that variations that may alter limits to operation are taken into account, and that operations are adjusted accordingly.</p> <p>4.4 Any existing site quarantine or bio-security a protocol is followed as required.</p> <p>4.5 All work is monitored to ensure that it is performed in an environmentally aware and safe manner and according to industry codes of practice.</p>
5. Perform follow up and clean-up activities on completion of spreading operations	<p>5.1 Machinery, equipment and hand tools are returned to depot or storage area after cleaning, checking for future serviceability, and carrying out basic preventative maintenance according to enterprise procedures.</p> <p>5.2 Faults are noted for remedial action.</p> <p>5.3 Records are completed legibly and accurately according to enterprise procedures and industry codes of practice.</p>

Variable	Range
Equipment	Must include: <ul style="list-style-type: none"> the tractors or other drive equipment used in the operation
Equipment and products	May include: <ul style="list-style-type: none"> all ground spreading machinery and equipment
Products to be spread	May include: <ul style="list-style-type: none"> chemical and organic fertilisers, composts, lime and dolomite

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: <ul style="list-style-type: none"> assess environmental and physical hazards that may be encountered when ground spreading and take appropriate action to minimise these risks maintain and operate spreading equipment to meet industry standards for uniformity of application maintain and operate spreading equipment to meet health and safety requirements

	<ul style="list-style-type: none"> • apply fertiliser or soil ameliorants at rate agreed by customer to specified land area
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • equipment being used and understanding of appropriate service and safety checks • environmental risks and how to identify and manage them • operational limits of equipment being used with regard to uniformity of application and health and safety risks • spreading characteristics of different fertiliser and soil ameliorant products • environmental impacts of fertiliser spreading including hazards to waterways • OHS hazards including operating in rough or steep terrain
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identifying hazards and implementing safe work procedures • communicating with clients to ensure a common understanding of task to be performed • monitoring and recording activities performed • operating equipment according to manufacturer recommendations and in line with equipment calibration • using maps and interpreting written instructions regarding areas to be spread, and products and rates to be applied • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Operate Compost Processing Plant, Machinery and Equipment
Unit Code	AGR FME3 14 0714
Unit Descriptor	This unit covers the process of operating compost processing plant, machinery and equipment to prepare raw materials in order to produce compost products and defines the standard required to: select and use various features and controls of a range of plant, machinery and equipment; implement work and equipment maintenance plans; determine appropriate operating methods; monitor input materials and report non-conformances; monitor outputs and report out-of-specification product; perform shutdown procedures; maintain records. This unit requires some discretion, judgement and limited supervision. This work is likely to be performed as a part of a team.

Elements	Performance Criteria
1. Organise plant, machinery and equipment operations	<p>1.1 Job sheet or work order is reviewed to clearly identify operating requirements.</p> <p>1.2 Equipment, materials and personnel requirements for safe, effective and efficient operation are identified and organised.</p> <p>1.3 Suitable Personal Protective Equipment (PPE) and clothing are selected, used, maintained and stored according to Occupational Health and Safety (OHS) requirements.</p>
2. Prepare plant, machinery and equipment for use	<p>2.1 Service log is checked to ensure service requirements have been</p> <p>2.2 Communication equipment, safety devices, lighting and alarm systems are checked for correct operation according to manufacturer specifications and enterprise and statutory requirements.</p> <p>2.3 Routine pre-operational checks are carried out to enterprise requirements and manufacturer specifications.</p> <p>2.4 Operational systems are checked and calibrated for correct operation according to enterprise requirements and manufacturer specifications.</p> <p>2.5 Faulty plant, machinery or equipment are/is identified, safety tagged and reported promptly according to enterprise requirements.</p> <p>2.6 OHS hazards associated with plant, machinery and equipment operation are identified, and risk is assessed and handled according to enterprise requirements.</p> <p>2.7 Environmental implications associated with operations are identified, assessed and reported according to enterprise requirements.</p>
3. Start and operate plant, machinery	<p>3.1 Operational area is checked and personnel in that area are informed of initiation of operation.</p>

and equipment	<p>3.2 Plant, <i>machinery and equipment</i> are started up using correct sequence and according to manufacturer specifications and enterprise requirements.</p> <p>3.3 Plant, machinery and equipment are operated in a safe and controlled manner according to manufacturer specifications and monitored for performance and efficiency.</p> <p>3.4 Input materials are monitored and non-conformances clearly identified and handled according to enterprise requirements.</p> <p>3.5 Processing outputs are monitored and adjustments to plant operation made to meet job specifications.</p> <p>3.6 An out-of-specification product or process outcome is identified rectified and reported to maintain the process within specification.</p>
4. Shut down plant, machinery and equipment	<p>4.1 Plant, machinery and equipment shut-down procedures are carried out to manufacturer specifications and enterprise requirements.</p> <p>4.2 Routine maintenance of plant, machinery and equipment is carried out to remove debris and contaminants and to ensure safe and efficient operation.</p> <p>4.3 Plant, machinery and equipment are cleaned, secured and stored according to manufacturer specifications and enterprise requirements.</p> <p>4.4 Unsafe plant, machinery or equipment are/is tagged or locked.</p>
5. Maintain records	<p>5.1 Plant, machinery and equipment operational records are maintained accurately and promptly according to enterprise requirements.</p> <p>5.2 Required maintenance, damage, malfunctions or irregular performance, and unsafe plant, machinery or equipment are recorded and/or reported according to enterprise requirements.</p>

Variable	Range
Personal Protective Equipment (PPE)	include that prescribed under legislation/regulations/codes of practice and workplace
Occupational Health and Safety (OHS) requirements	<p>to be in accordance with applicable legislation and regulations and organizational safety policies and procedures and may include:</p> <ul style="list-style-type: none"> • personal protective equipment and clothing • workplace environment and safety, safety equipment • enterprise first aid and first aid equipment • hazard and risk control and hazardous materials and substances electrical safety • elimination of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures • use of tooling and equipment

	<ul style="list-style-type: none"> • handling of material • use of fire fighting equipment
Routine pre-operational checks	<p>May include</p> <ul style="list-style-type: none"> • oils and water level • tyre pressure • couplings • loose bolts and nuts • wear and tear of body and components
OHS hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running • working under machines not secured • unprotected moveable parts • toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • stumps and logs in the soil or covered by debris • spillages, waste and debris especially on floors • crash with tractors/trucks
Environmental implications	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • waste management • pollution • dust, unpleasant smell and clean-up management
Types of machinery and equipment	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • machinery and equipment used to prepare raw materials in order to produce compost products

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • select and use various features and controls of a range of plant, machinery and equipment • implement work and equipment maintenance plans • determine appropriate operating methods • monitor input materials and report non-conformances • monitor outputs and report out-of-specification product • perform shutdown procedures and maintain records
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • enterprise guidelines associated with operation of plant, machinery and equipment • environmental licenses, impacts and procedures • identification of contaminants • lock-out and tag-out procedures for plant, machinery and equipment • manufacturer specifications for servicing of plant, machinery and equipment • operating principles and operating methods for plant, machinery and equipment

	<ul style="list-style-type: none"> • potential risks and hazards associated with operation of plant, machinery and equipment • principles of weight distribution with regard to load-shifting and machinery movement • procedures for cleaning, securing and storing machinery, equipment and materials • product types and characteristics • raw material types and characteristics • relevant legislation, regulations and codes of practice with regard to operator licensing, roads and traffic requirements • relevant legislation, regulations and codes of practice with regard to workplace OHS and the use and control of hazardous substances, such as fuel and recipe inputs • OHS legislation, codes of practice and specific hazards such as hazardous substances and exposure to organic micro particles
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • basic computer and software skills • demonstrating safe and environmentally responsible workplace practices • identifying and handling raw materials and contaminants • operating plant, machinery and equipment according to manufacturer specifications and OHS standards • using emergency and personal protective equipment • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Conduct Backhoe/Loader Operations
Unit Code	AGR FME3 15 0714
Unit Descriptor	This unit covers the conducting backhoe/loader operations in the civil construction industry. It includes: planning and preparing; conducting machine pre-operational checks; operating backhoe/loaders; lifting, carrying and placing materials; selecting, removing and fitting attachments; relocating the backhoe/loaders; carrying out machine operator maintenance; and cleaning up.

Elements	Performance Criteria
1. Plan and prepare	<p>1.1 Compliance documentation relevant to conduct backhoe/loader tasks is accessed, interpreted and applied.</p> <p>1.2 Work instructions is obtained, confirmed and applied to the allotted task.</p> <p>1.3 Safety requirements are obtained, confirmed and applied to the allotted task.</p> <p>1.4 Signage requirements are identified, obtained and implemented from the project traffic management plan.</p> <p>1.5 Plant, tools and equipment are selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults rectified or reported.</p> <p>1.6 Environmental protection requirements are identified confirmed and applied from the project environmental management plan to the allotted task.</p>
2. Conduct machine pre-operational checks	<p>2.1 Pre-start, start-up, park and shutdown procedures are carried out.</p> <p>2.2 Machine controls and functions including implements or other attachments, brakes and manoeuvrability are checked for serviceability and any faults rectified or reported.</p>
3. Operate backhoe/ loader	<p>3.1 Site hazards associated with backhoe/loader operations are identified and safe operating techniques used to minimise risk.</p> <p>3.2 Operating techniques for backhoe/loader are identified and applied to achieve optimum output in accordance with design specifications while achieving specified tolerances.</p> <p>3.3 Machine is operated to work instructions.</p>
4. Lift, carry and place materials	<p>4.1 Communication practices associated with transportation and lifting of materials are conducted.</p> <p>4.2 Slings and lifting gear are selected and attached in accordance with safe working load requirements.</p> <p>4.3 Weight of load is established.</p> <p>4.4 Machinery is positioned and located to ensure stability to effectively shift materials according to job specifications.</p>

	<p>4.5 Load is shifted safely and effectively.</p> <p>4.6 Load is moved in accordance with conventional hand and audible signals.</p>
5. Select, remove and fit attachments	<p>5.1 Attachment is selected for the task.</p> <p>5.2 Attachment is removed and fitted.</p> <p>5.3 Attachment is tested to ensure correct fitting and operation.</p> <p>5.4 Attachment is used in accordance with recommendations and design limits.</p> <p>5.5 Removed attachments are cleaned and stored in designated location.</p>
6. Relocate the backhoe/ loader	<p>6.1 Backhoe/loader is moved safely between worksites, observing relevant codes and traffic management requirements.</p> <p>6.2 Backhoe/loader is prepared for relocation.</p>
7. Carry out machine operator maintenance	<p>7.1 Machine is safely parked, shutdown and prepared for maintenance.</p> <p>7.2 Inspection and fault finding are conducted.</p> <p>7.3 Defective parts are removed, replaced safely and effectively.</p> <p>7.4 Regular programmed maintenance tasks are carried out.</p>
8. Clean up	<p>8.1 Work area is cleared and disposed of or materials are recycled in accordance with project environmental management plan.</p> <p>8.2 Plant, tools and equipment are cleaned, checked, maintained and stored.</p>

Variable	Range
Compliance documentation	<p>May include:</p> <ul style="list-style-type: none"> • legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Ethiopian standards • codes of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Backhoe/loader	Is a self-propelled wheeled machine with a main structural support designed to carry both a front-mounted bucket loading mechanism and a rear-mounted backhoe
Backhoe/loader tasks	<p>May include:</p> <ul style="list-style-type: none"> • mixing materials • stripping/spreading topsoils and materials • trench excavation, backfilling, lifting and carrying materials • loading dump trucks, wagons, hoppers • chutes and cutting/boxing • scrub clearing, ripping, compacting • cutting, batters and benches, rock breaking

	<ul style="list-style-type: none"> • demolition and any activities associated with the attachments listed
Work instructions	<p>May include:</p> <ul style="list-style-type: none"> • plans, specifications, quality requirements and operational details • quality requirements may include but not be limited to dimensions, tolerances, standards of work and material standards as detailed in the project drawings, specifications and project documentation to meet client satisfaction
Safety requirements	<p>May include :</p> <ul style="list-style-type: none"> • in accordance with legislation and regulations, organisational safety policies and procedures, and project safety plan • protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, use of First Aid equipment, hazard control and hazardous materials and substances • personal protective equipment is to include that prescribed under legislation, regulation and workplace policies and practices • safe operating procedures which are to include but not be limited to recognising and preventing hazards associated with underground and overhead services, other machines, personnel, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • safe parking practices which is to include but not be limited to ensuring access ways are clear, equipment/ machinery is away from overhangs and refuelling sites, safe distance from excavations, and secured from unauthorised access or movement • hazards and risks may include but not be limited to - uneven/unstable terrain, trees, fires, overhead and underground services, bridges, buildings, excavations, traffic, embankments, cuttings, structures and hazardous materials • emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational First Aid requirements and evacuation
Tools and equipment	<p>May include :</p> <ul style="list-style-type: none"> • hand tools and maintenance equipment relevant to the particular loader and may include lifting equipment
Environmental protection requirements	<p>May include :</p> <ul style="list-style-type: none"> • organisational/project environmental management plan • waste management • water quality protection • soil erosion, vibration • movement discomfort • dust and clean-up management
Communications practices	<p>May include :</p> <ul style="list-style-type: none"> • verbal instructions and fault reporting and may include two

	<p>way radio, hand signals, mobile phone, site specific instructions, written instructions or instructions related to job/task</p> <ul style="list-style-type: none"> on site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Materials	<p>May include :</p> <ul style="list-style-type: none"> clays, silts, stone, gravel, mud, rock, sand, topsoil, blended materials, organic materials, typical construction site materials/waste and bituminous mixes rock types may include metamorphic, igneous and sedimentary
Attachments	<p>May include :</p> <ul style="list-style-type: none"> extending devices tilt bucket, buckets compaction wheel, ripper plate compactor, rock breaker auger, broom, mower/slasher forklift, 4 in 1 bucket and free/rock grab
Maintenance	<p>May include :</p> <ul style="list-style-type: none"> cleaning, authorised servicing and the monitoring, recording and reporting of faults; It may also include the conduct of : authorised minor replacements and the provision of assistance to maintenance personnel during maintenance and repair activities
Skid steer loader	<p>may include:</p> <ul style="list-style-type: none"> compacting, truck excavation, lifting and carrying materials, cutting batters and benches, rock breaking and any activities associated with attachments listed
Skid steer loader tasks	<p>may include:</p> <ul style="list-style-type: none"> stripping/ spreading topsoil and materials backfilling, lifting, loading vehicles, excavations mixing materials and site clean up

Evidence Guide

Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> knowledge of the requirements, procedures and instructions for conducting backhoe/loader operations implementation of requirements, procedures and techniques for the safe, effective and efficient completion of backhoe/loader operations, including: <ul style="list-style-type: none"> in a minimum of two different soil types and to include the mandatory tasks: mixing materials, stripping/spreading topsoils and materials, trench excavation, backfilling, lifting and carrying materials, loading dump trucks, wagons, hoppers, chutes, and cutting/boxing working with others to undertake and complete backhoe/loader operations that meet all of the required outcomes
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	<ul style="list-style-type: none"> • consistent timely completion of backhoe/loader operations that safely, effectively and efficiently meet the required outcomes
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • backhoe/loader types, characteristics, technical capabilities and limitations • basic principles of soil technology for civil works • site and equipment safety requirements • techniques for calculating safe working loads • backhoe/loader techniques related to essential tasks • processes for interpreting drawings and sketches • operational, maintenance and basic diagnostic procedures • site isolation and traffic control responsibilities and authorities • materials safety data sheet and materials handling methods • project quality requirements • methods of changing machine attachments • safe operating techniques in all terrain • basic earthworks calculations • civil construction activity sequences of earthworks and drainage • levelling techniques • JSA's/Safe work method statement
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • apply legislative, organisation and site requirements and procedures • apply site and equipment safety requirements • apply techniques for calculating safe working loads • apply backhoe/loader techniques related to essential tasks • interpret drawings and sketches • apply operational, maintenance and basic diagnostic procedures • apply site isolation and traffic control responsibilities and authorities • interpret materials safety data sheet and materials handling methods • apply project quality requirements • use civil construction terminology • apply methods of changing machine attachments • apply safe operating techniques in all terrain • carry out basic earthworks calculations • apply levelling techniques • interpret JSA's/Safe work method statement
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Perform Machinery Maintenance
Unit Code	<u>AGR FME3 16 0714</u>
Unit Descriptor	This unit covers the process of maintaining machinery and equipment that is used principally in agriculture, horticulture, and conservation and land management work and defines the standard required to: carry out engine/equipment checks according to operator manuals and enterprise requirements; carry out lubrication and replacement of oils and filters according to operator manuals; carry out transmission checks, including drive and steering clutches and oil levels; check machinery and equipment components for wear and tear, and replace, tag and report defects if necessary; dispose of replaced parts and oils according to legislation and enterprise procedures; and record all details of maintenance and requirements for monitoring. This unit applies to workers in agriculture, horticulture and land management who ensure that machinery and equipment for the enterprise is maintained in a way that allows the core business of the enterprise to continue with minimal disruption. Some problem solving and organisational skills are also required.

Elements	Performance Criteria			
1. Carry out engine/equipment checks	<p>1.1 Timed and regular engine equipment checks are carried out on specialised machinery and equipment as specified in operator manuals.</p> <p>1.2 All relevant grease or lubricant a point is lubricated according to manufacturer specifications.</p> <p>1.3 Oils and filters are changed at intervals prescribed in operator manuals.</p> <p>1.4 Hydraulic hoses and systems are checked for deterioration and defects actioned in line with supervisor's instructions.</p> <p>1.5 Occupational Health and Safety (OHS) hazards are identified, risks assessed and risk controls are implemented.</p> <p>1.6 Relevant tools ,equipment and materials requirements are identified and made ready for use prior to the start of work practice as per job specification and work place procedures</p>			
2. Carry out transmission checks	<p>2.1 Drive and steering clutches are checked for operation and adjustment in line with operator manual.</p> <p>2.2 Transmission oil levels are checked in line with operator manual.</p> <p>2.3 Tracks/wheels and undercarriage are checked for oil leaks and wear.</p> <p>2.4 Faulty seals or leaks are identified and corrective actions taken according to operator's instructions.</p> <p>2.5 Machine is regularly cleaned as an integral part of maintenance checks.</p>			
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3. Maintain components and attachments	<p>3.1 Personal protective equipment (PPE) is selected, used and maintained according to procedures.</p> <p>3.2 Machine operational replacement wear components are checked for wear and condition.</p> <p>3.3 Worn or unserviceable replacement components are replaced as part of daily routines.</p> <p>3.4 Component inspection and replacement activities are completed safely following enterprise and industry guidelines.</p> <p>3.5 Moving operational components are checked for wear and condition and adjusted to the tolerances specified in operator manuals where applicable.</p> <p>3.6 Work areas are cleaned, returned to operating condition and maintained according to enterprise and OHS requirements.</p>
4. Record maintenance	<p>4.1 Identified faults and defects are recorded in machine record.</p> <p>4.2 Maintenance procedures including duplicates usage are recorded in workshop record.</p> <p>4.3 Service or repair requirements are reported and actioned according to prescribed procedures.</p>

Variable	Range
Types of machinery	<p>May include:</p> <ul style="list-style-type: none"> • machinery and equipment that is used on diverse agricultural, horticultural and rural enterprises; This includes: <ul style="list-style-type: none"> ➤ heavy earthmoving equipment ➤ tractors, vehicles and trucks ➤ front end loaders, skid steer loaders, ➤ self-propelled harvesters and pickers ➤ forklifts, land levellers ➤ pumps ➤ grain handling equipment
Occupational Health and Safety (OHS) hazards	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • torn or improper use personal protective equipments • worn out repair tools • servicing while engine is running • working under machines not secured • unprotected moveable parts • electricity and water • toxic substances • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • lifting practices, • stumps and logs in the soil or covered by debris • spillages, waste and debris especially on floors • crash with tractors/trucks

Tools and equipment	<p>May include:</p> <ul style="list-style-type: none"> • hand tools power hand held tools jacks • extractor jaws, hydraulic lifts, battery charger • welding machine, forges, goggles, lubricating cans • measuring devices, washing tanks
Materials	<p>May include:</p> <ul style="list-style-type: none"> • cleaning materials ,oils and grease, fuel, spare parts
Personal Protective Equipment (PPE)	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices
OHS requirements	<p>are to be in accordance with applicable legislation and regulations, and organizational safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> • personal protective equipment and clothing • workplace environment and safety, safety equipment • enterprise first aid and first aid equipment • hazard and risk control and hazardous materials and substances electrical safety • elimination of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures • use of tooling and equipment • handling of material and use of fire fighting equipment

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • carry out engine/equipment checks according to operator manuals and enterprise requirements • carry out lubrication and replacement of oils and filters according to operators manual • carry out transmission checks including drive and steering clutches and oil levels • check machinery and equipment components for wear and tear, and replace, tag and report defects, if necessary • dispose of replaced parts and oils according to legislation and enterprise procedures • record all details of maintenance and requirements for monitoring
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • engine function principles • turbo charging and after cooling • assessing engine specifications in line with power requirements • all engine electric and hydraulic indicators and gauges • transmission and drive systems • machinery and equipment operation principles • environmental impacts of machinery servicing and legislation covering disposal of fuels, oils and other wastes • OHS and environmental legislation, enterprise requirements and codes of practice

Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify hazards and implement safe work procedures • carry out engine/equipment checks • carry out transmission checks • replace parts and carry out lubrication required at servicing • maintain machinery and equipment components • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record information collected accurately and legibly, and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Coordinate Machinery and Equipment Maintenance and Repair
Unit Code	AGR FME3 17 0714
Unit Descriptor	This unit covers the process of coordinating machinery and equipment maintenance and repair for a small enterprise and defines the standard required to: seek technical advice on scale of repairs required where necessary; establish priorities for work to be carried out; calculate material and resource requirements and place orders; respond to contingencies and take corrective actions where necessary; monitor and document personnel, activities, timelines and materials usage; monitor and report on activities undertaken. This unit applies to workers in agriculture, horticulture and land management who ensure that machinery and equipment for the enterprise is maintained and repaired in a way that allows the core business of the enterprise to continue with minimal disruption.

Elements	Performance Criteria
1. Prepare for maintenance and repair work	<p>1.1 Requirements of the work responsibilities are clarified with the supervisor and according to enterprise guidelines.</p> <p>1.2 Equipment and material resource requirements are identified according to the scope of the coordination work and the supervisor's instructions.</p> <p>1.3 The priorities are identified and documented for maintenance and repair activities and time allocation, and presented to the supervisor for verification.</p> <p>1.4 The environmental implications of the proposed maintenance and repair work are identified and the likely outcomes assessed and reported to the supervisor.</p> <p>1.5 Occupational Health and Safety (OHS) hazards are identified, risks assessed and risk controls implemented.</p> <p>1.6 Personal Protective Equipment (PPE) is selected, used and maintained according to procedures.</p>
2. Maintain and repair machinery and equipment	<p>2.1 Equipment/machinery is maintained and repaired as authorised by the supervisor and according to enterprise guidelines and work place priorities.</p> <p>2.2 Materials to assist in maintenance and repair work are purchased, stored and/or used as required.</p> <p>2.3 Delivery of materials to the site is organised according to workplace priorities.</p> <p>2.4 Machinery and equipment are organised to be on-site in good order when they are required.</p> <p>2.5 Maintenance and repairs requiring specialist attention and work are identified and organised according to enterprise guidelines.</p>

3. Co-ordinate and report on maintenance and repair activities	<p>3.1 Resources are coordinated and timed to suit the maintenance and repair activities and priority of work.</p> <p>3.2 Operators are informed of appropriate use and their responsibilities in respect to operational maintenance requirements of machinery and equipment.</p> <p>3.3 Personnel, activities, timelines and materials usage are monitored and documented according to enterprise guidelines.</p> <p>3.4 Contingency situations are recognised and reported to the supervisor and corrective actions taken according to enterprise guidelines.</p> <p>3.5 A simple report is written to inform management of maintenance and repair activities are undertaken and completed.</p>
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Variable	Range
Equipment and material	May include <ul style="list-style-type: none"> • hand tools power hand held tools jacks • extractor jaws, hydraulic lifts, battery charger • welding machine, forges, goggles, lubricating cans • measuring devices, cleaning materials , washing tanks
Occupational Health and Safety (OHS) Hazards	May include: <ul style="list-style-type: none"> • disturbance of services • solar radiation • dust • noise • through traffic • uneven surfaces and holes • moving machinery and machinery parts • powered equipment and hand tools • hazards from use of hired equipment • overhead hazards including powerlines
Personal Protective Equipment (PPE)	include that prescribed under legislation/regulations/codes of practice and workplace policies and practices

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: <ul style="list-style-type: none"> • seek technical advice on scale of repairs required where necessary • establish priorities for work to be carried out • calculate material and resource requirements and place orders • respond to contingencies and take corrective actions where necessary • monitor and document personnel, activities, timelines and materials usage • monitor and report on activities undertaken

Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • work schedule programming • possible causes of disruption to work activities and their effect on quality and time schedules • responsibilities and requirements for maintaining and repairing machinery and equipment • the range, use and availability of materials, equipment and machinery that may be required for the project • environmental awareness associated with undertaking maintenance and repair work on machinery and equipment to ensure the impact on the environment is minimal • OHS issues, legislative requirements and codes of practice
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • implement safe work procedures and ensure a safe workplace • read and interpret documentation associated with work site activities • calculate material and resource requirements • co-ordinate a team to achieve optimum performance • document results clearly and concisely • perform an OHS risk assessment • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Transport Machinery
Unit Code	AGR FME3 18 0714
Unit Descriptor	<p>This unit covers the process of safe movement, loading and securing of machinery for the purpose of transport and defines the standard required to: load and tie down machinery for transport; arrange permits and escorts as required by legislation; drive machinery to destination; complying with requirements for moving wide loads; unload machinery safely.</p> <p>This unit applies to workers in agriculture, horticulture and land management who transport machinery and equipment for the enterprise.</p>

Elements	Performance Criteria
1. Load machines	<p>1.1 The enterprise safe operating procedures are sourced and complied with for transporting machinery.</p> <p>1.2 Trailer or float is prepared for loading according to contractor policy.</p> <p>1.3 Machine is loaded in compliance with safe operating procedures.</p> <p>1.4 Tying down procedures is completed in line with recognised industry standards.</p> <p>1.5 Machine is secured to prevent movement in transport according to industry practice.</p> <p>1.6 Legal requirements are met for signs indicating oversized loads.</p> <p>1.7 Legal requirements are arranged for permits, clearances and escorts for transporting oversized loads.</p>
2. Transport machines	<p>2.1 Machines are driven on or off road in compliance with relevant legislation.</p> <p>2.2 Machinery is loaded and driven safely to destination in compliance with relevant legislation.</p> <p>2.3 Transport route is selected for oversized loads comply with permits, clearances and relevant legislation.</p> <p>2.4 Machines are unloaded safely in line with accepted workplace policy.</p>

Variable	Range
The types of machinery	May include safe movement, loading and securing of machinery for the purpose of transport, including large machinery such as that used for earthmoving or agricultural operations.

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> load, tie down and secure machinery for transport

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	<ul style="list-style-type: none"> • arrange permits and escorts as required by legislation • drive machinery to destination, complying with requirements for moving wide loads • unload machinery safely
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • the provisions, requirements and legislation pertaining to heavy transport • principles for machine operation • tying down procedures for large machinery • Occupational Health and Safety (OHS), vehicle and operator licensing, and road transport legislation • OHS and environmental legislation, codes of practice and enterprise requirements
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify hazards and implement safe work procedures • load and unload earthmoving machines • secure machinery as a transport load • provide an escort to wide loads • travel earthmoving machines • use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required • use numeracy skills to estimate, calculate and record routine workplace measures • use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competency may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Implement and Monitor Environmentally Sustainable Work Practices
Unit Code	AGR FME3 19 0714
Unit Descriptor	<p>This unit covers the performance outcomes, skills and knowledge required to effectively analyse the workplace in relation to environmentally sustainable work practices and to implement improvements and monitor their effectiveness.</p> <p>This unit requires the ability to access industry information, applicable legislative and Occupational Health and Safety (OHS) guidelines. This unit applies to those with responsibility for a specific area of work or who lead a work group or team. It addresses the knowledge, processes and techniques necessary to implement and monitor environmentally sustainable work practices, including the development of processes and tools, such as: identifying areas for improvement; developing plans to make improvements; implementing and monitoring improvements in environmental performance. A person who demonstrates competence in this unit must be able to provide evidence of the ability to implement and monitor integrated environmental and resource efficiency management policies and procedures within an organisation. Evidence must be strictly relevant to the particular workplace role.</p>

Elements	Performance Criteria			
1. Investigate current practices in relation to resource usage	<p>1.1 Environmental regulations applying to the enterprise are identified.</p> <p>1.2 Procedures are analysed for assessing compliance with environmental/sustainability regulations.</p> <p>1.3 Information on environmental and resource efficiency systems and procedures are collected and provided to the work group where appropriate.</p> <p>1.4 Information is collected, analysed and organized from a range of sources to provide information/advice and tools/resources for improvement opportunities.</p> <p>1.5 Current resource usage of members of the work group is measured and documented.</p> <p>1.6 Current purchasing strategies are analysed and documented.</p> <p>1.7 Current work processes are analysed to access information and data to assist in identifying areas for improvement.</p>			
2. Set targets for improvements	<p>2.1 Input is sought from stakeholders, key personnel and specialists.</p> <p>2.2 External sources of information and data are accessed as required.</p> <p>2.3 Alternative solutions are evaluated to workplace environmental issues.</p>			
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	2.4 Efficiency targets are set.
3. Implement performance improvement strategies	<p>3.1 Appropriate techniques and tools are sourced and used to assist in achieving efficiency targets.</p> <p>3.2 Continuous improvement strategies are applied to own work area of responsibility, including ideas and possible solutions to communicate to the work group and management.</p> <p>3.3 Environmental and resource efficiency improvement plans are implemented and integrated for own work group with other operational activities.</p> <p>3.4 Team members are supervised and supported to identify possible areas for improved practices and resource efficiency in work area.</p> <p>3.5 Suggestions and ideas about environmental and resource efficiency management are sought from stakeholders and act upon where appropriate.</p> <p>3.6 Costing strategies are implemented to fully value environmental assets.</p>
4. Monitor performance	<p>4.1 Evaluation and monitoring, tools and technology are used/or developed.</p> <p>4.2 Outcomes to report on efficiency targets are documented and communicated to key personnel and stakeholders.</p> <p>4.3 Strategies and improvement plans are evaluated.</p> <p>4.4 New efficiency targets are set and new tools and strategies are investigated and applied.</p> <p>4.5 Successful strategies are promoted and participants rewarded, where possible.</p>

Variable	Range
Compliance	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • meeting relevant laws, by laws and regulations or best practice or codes of practice to support compliance in environmental performance and sustainability at each level as required (such as Environmental Protection or Biodiversity Conservation Act): <ul style="list-style-type: none"> ➤ international ➤ commonwealth ➤ state/territory ➤ industry and organisation
Sources	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • organisation specifications • regulatory sources • relevant stakeholders and resource use
Purchasing strategies	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • influencing suppliers to take up environmental sustainability approaches • researching and participating in programs such as a supply chain program to purchase sustainable products

Stakeholders, key personnel and specialists	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • individuals and groups both inside and outside the organisation who have direct or indirect interest in the organisation's conduct, actions, products and services, including: <ul style="list-style-type: none"> ➤ customers ➤ employees at all levels of the organisation ➤ government ➤ investors ➤ local community ➤ other organisations and suppliers • key personnel within the organisation, and specialists outside the organisation who may have particular technical expertise
Techniques and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • examination of invoices from suppliers • examination of relevant information and data • measurements made under different conditions • others as appropriate to the specific industry context
Environmental and resource efficiency improvement plans	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • addressing environmental and resource sustainability initiatives such as: environmental management systems, action plans, green office programs, surveys and audits • applying the waste management hierarchy in the workplace • determining organisation's most appropriate waste treatment including waste to landfill, recycling, re use, recoverable resources and wastewater treatment • initiating and/or maintaining appropriate organisational procedures for operational energy consumption, including stationary energy and non stationary (transport) • preventing and minimising risks, and maximising opportunities such as: <ul style="list-style-type: none"> • improving resource/energy efficiency • reducing emissions of greenhouse gases • reducing use of non renewable resources • referencing standards, guidelines and approaches such as: <ul style="list-style-type: none"> ➤ ecological foot printing ➤ Energy Efficiency Opportunities Bill 2005 ➤ Global Reporting Initiative ➤ green office program - a cultural change program ➤ green purchasing ➤ Greenhouse Challenge Plus (Ethiopian government initiative) ➤ ISO 14001:1996 Environmental management systems life cycle analyses ➤ product stewardship ➤ supply chain management ➤ sustainability covenants/compacts ➤ triple bottom line reporting
Suggestions	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • prevent and minimise risks and maximise opportunities such as: <ul style="list-style-type: none"> ➤ usage of solar or renewable energies where appropriate

	<ul style="list-style-type: none"> ➤ reducing emissions of greenhouse gases ➤ reducing use of non renewable resources ➤ making more efficient use of resources, energy and water ➤ maximising opportunities to re use, recycle and reclaim materials • identifying strategies to offset or mitigate environmental impacts: <ul style="list-style-type: none"> ➤ purchasing carbon credits ➤ energy conservation ➤ reducing chemical use ➤ reducing material consumption ➤ expressing purchasing power through the selection of suppliers with improved environmental performance e.g. purchasing renewable energy ➤ eliminating the use of hazardous and toxic materials
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Evidence Guide	
Critical aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • knowledge of relevant compliance requirements within work area • developing plans to make improvements • planning and organising work group activities in relation to measuring current use and devising strategies to improve usage • monitoring resource use and improvements for environmental performance relative to work area and supervision • ensuring appropriate action is taken within work area in relation to environmental/sustainability compliance and potential hazards • implementing new approaches to work area in an effort to resolve and improve environmental and resource efficiency issues and reporting as required
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • best practice approaches relevant to own area of responsibility and industry • compliance requirements within work area for all relevant environmental/sustainability legislation, regulations and codes of practice including resource hazards/risks associated with work area, job specifications and procedures • environmental and energy efficiency issues, systems and procedures specific to industry practice • external benchmarks and support for particular benchmarks to be used within organisation, including approaches to improving resource use for work area and expected outcomes • OHS issues and requirements • organisational structure and reporting channels and procedures • quality assurance systems relevant to own work area • strategies to maximise opportunities and to minimise impact relevant to own work area • supply chain procedures

	<ul style="list-style-type: none"> • terms and conditions of employment including policies and procedures, such as daily tasks, work area responsibilities, employee, supervisor and employer rights, equal opportunity
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • analytical skills to analyse problems, to devise solutions and to reflect on approaches taken • change management skills • communication skills to answer questions, clarify and acknowledge suggestions relating to work requirements and efficiency • communication/consultation skills to support information flow from stakeholders to the work group • innovation skills to identify improvements, to apply knowledge about resource use to organisational activities and to develop tools • literacy skills to comprehend documentation, to interpret environmental and energy efficiency requirements, to create tools to measure and monitor improvements and to report outcomes • numeracy skills to analyse data on organisational resource consumption and waste product volumes • planning and organising skills to implement environmental and energy efficiency management policies and procedures relevant to own work area • problem solving skills to devise approaches to improved environmental sustainability and to develop alternative approaches as required • technology skills to operate and shut down equipment; where relevant, to use software systems for recording and filing documentation to measure current usage; and to use word processing and other basic software for interpreting charts, flowcharts, graphs and other visual data and information • supervisory skills to work effectively with a team
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Apply First Aid
Unit Code	AGR FME3 20 0714
Unit Descriptor	This unit of competency describes the skills and knowledge required to provide first aid response, life support, management of casualty(s), the incident and other first aiders, until the arrival of medical or other assistance. These skills and knowledge may be applied in a range of situations, including community and workplace settings.

Elements	Performance Criteria
1. Assess the situation	<p>1.1 Hazards are identified, assessed and minimized in the situation that may pose a risk of injury or illness to self and others.</p> <p>1.2 Immediate risk is minimized to self and casualty's health and safety by controlling any hazard in accordance with occupational health and safety requirements.</p> <p>1.3 Casualty is assessed and injuries, illnesses and conditions are identified.</p>
2. Apply first aid procedures	<p>2.1 Information is calmly provided to reassure casualty, adopting a communication style to match the casualty's level of consciousness.</p> <p>2.2 Available resources and equipment are used to make the casualty as comfortable as possible.</p> <p>2.3 The casualty is responded to in a culturally aware, sensitive and respectful manner.</p> <p>2.4 The nature of casualty's injury/condition and relevant first aid procedures are determined and explained to provide comfort.</p> <p>2.5 Consent is sought from casualty prior to applying first aid management.</p> <p>2.6 First aid management is provided in accordance with established first aid principles and Ethiopian resuscitation council (arc) guidelines and/or state/territory regulations, legislation and policies and industry requirements.</p> <p>2.7 First aid assistance is sought from others in a timely manner and as appropriate.</p> <p>2.8 First aid equipment is correctly operated as required for first aid management according to manufacturer/supplier's instructions and local policies and/or procedures.</p> <p>2.9 Safe manual handling techniques are used as required.</p> <p>2.10 Casualty's condition is monitored and responded in accordance with effective first aid principles and procedures.</p> <p>2.11 Casualty management is finalized according to casualty's needs and first aid principles.</p>

3. Communicate details of the incident	<p>3.1 Ambulance support and/or appropriate medical assistance are/is requested according to relevant circumstances using relevant communication media and equipment.</p> <p>3.2 Assessment of casualty's condition and management activities is accurately conveyed to ambulance services /other emergency services/relieving personnel.</p> <p>3.3 Reports are prepared as appropriate in a timely manner, presenting all relevant facts according to established procedures.</p> <p>3.4 Details of casualty's physical condition, changes in conditions, management are accurately recorded and responded to management in line with established procedures.</p> <p>3.5 Confidentiality of records and information/documentation is maintained in line with privacy principles and statutory and/or organisation policies.</p>
4. Evaluate own performance	<p>4.1 Feedback is sought from appropriate clinical expert.</p> <p>4.2 The possible psychological impacts are recognized on rescuers of involvement in critical incidents.</p> <p>4.3 Debriefing/evaluation as appropriate is made participatory in to improve future response and address individual needs.</p>

Variable	Range
Hazards	<p>May include but not limited:</p> <ul style="list-style-type: none"> • A source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these • physical hazards • biological hazards • chemical hazards • hazards associated with manual handling
Risk	<p>May include but not limited:</p> <ul style="list-style-type: none"> • risks from equipment, machinery and substances • risks from first aid equipment • environmental risks • exposure to blood and other body substances • risk of further injury to the casualty • risks associated with the proximity of other workers and bystanders • risks from vehicles
Resources and equipment	<p>May include but not limited:</p> <ul style="list-style-type: none"> • AED • first aid kit • auto-injector • puffer/inhaler • resuscitation mask or barrier • spacer device

First aid management	<p>The setting in which first aid is provided, including:</p> <ul style="list-style-type: none"> • workplace policies and procedures • industry/site specific regulations, codes, etc • OHS requirements • location and nature of the incident • situational risks associated with, for example, electrical and biological hazards, weather, motor vehicle accidents • location of emergency services personnel • The use and availability of first aid equipment and resources • Infection control • Legal and social responsibilities of first aider
Established first aid principles	<p>May include but not limited:</p> <ul style="list-style-type: none"> • Preserve life • Prevent illness, injury and condition(s) becoming worse • Promote recovery • Protect the unconscious casualty
Casualty's condition	<p>May include but not limited:</p> <ul style="list-style-type: none"> • Abdominal injuries • Airway obstruction • Allergic reactions • Altered and loss of consciousness • Bleeding • Burns - thermal, chemical, friction, electrical • Chest pain/cardiac arrest • Injuries: cold and crush injuries; eye and ear injuries; head, neck and spinal injuries; minor skin injuries; needle stick injuries; soft tissue injuries including sprains, strains, dislocations • Near drowning • Envenomation - snake, spider, insect and marine bites • Environmental conditions such as hypothermia, hyperthermia, dehydration, heat stroke • Fractures • Medical conditions, including cardiac conditions, epilepsy, diabetes, asthma and other respiratory conditions • No signs of life • Poisoning and toxic substances (including chemical contamination) • Respiratory distress/arrest • Seizures • Shock • Stroke • Substance misuse - common drugs and alcohol, including illicit drugs.
Communication media and equipment	<p>May include but not limited:</p> <ul style="list-style-type: none"> • telephones, including landline, mobile and satellite phones • HF/VHF radio • flags • flares • two way radio

	<ul style="list-style-type: none"> • email • electronic equipment • hand signals
Documentation	<p>May include but not limited:</p> <ul style="list-style-type: none"> • injury report forms • workplace documents as per organisation requirements • person administering • dose • vital signs <p>May include recording:</p> <ul style="list-style-type: none"> • time • location • description of injury • first aid management • fluid intake/output, including fluid loss via: <ul style="list-style-type: none"> • blood • vomit • faeces • urine • administration of medication including: <ul style="list-style-type: none"> • time • date
Appropriate clinical expert	<p>May include but not limited:</p> <ul style="list-style-type: none"> • ambulance officer/paramedic • other medical/health worker
Contextualisation to address specific requirements	<p>May include but not limited:</p> <ul style="list-style-type: none"> • focus on first aid management of specific types of injury • first aid provision under specific constraints or circumstances (e.g. in confined spaces, in maritime work environment or in work environment involving identified risks/hazards)
Vital signs	<p>May include but not limited:</p> <ul style="list-style-type: none"> • consciousness • breathing and circulation

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • competence should be demonstrated working individually and, where appropriate, as part of a first aid team • consistency of performance should be demonstrated over the required range of situations relevant to the workplace or community setting • currency of first aid knowledge and skills is to be demonstrated in line with regulations, legislation and policies, Ethiopian Red Cross(ERC) and industry guidelines
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of;</p> <ul style="list-style-type: none"> • ERC Guidelines relating to provision of first aid as outlined • Working knowledge of: <ul style="list-style-type: none"> • basic principles and concepts underlying the practice of first aid

	<ul style="list-style-type: none"> • procedures for dealing with major and minor injury and illness • priorities of management in first aid when dealing with life threatening conditions • basic occupational health and safety requirements in the provision of first aid • infection control principles and procedures, including use of standard precautions • chain of survival • first Aiders' skills and limitations • Understanding of the use of an Automated External Defibrillator (AED), including when to use and when not to • First aid management of: <ul style="list-style-type: none"> ➤ abdominal injuries ➤ allergic reactions ➤ altered and loss of consciousness ➤ bleeding ➤ burns - thermal, chemical, friction, electrical ➤ cardiac arrest ➤ casualty with no signs of life ➤ chest pain ➤ choking/airway obstruction ➤ injuries: cold and crush injuries; eye and ear injuries; head, neck and spinal injuries; minor skin injuries; needle stick injuries; soft tissue injuries including sprains, strains, dislocations ➤ envenomation - snake, spider, insect and marine bites ➤ environmental impact such as hypothermia, hyperthermia, dehydration, heat stroke ➤ fractures • medical conditions, including cardiac conditions, epilepsy, diabetes, asthma and other respiratory conditions: <ul style="list-style-type: none"> ➤ near drowning ➤ poisoning and toxic substances (including chemical contamination) ➤ respiratory distress ➤ seizures ➤ shock ➤ stroke ➤ substance misuse - common drugs and alcohol, including illicit drugs ➤ Awareness of stress management techniques and available support • Social/legal issues: <ul style="list-style-type: none"> ➤ duty of care ➤ need to be culturally aware, sensitive and respectful ➤ importance of debriefing ➤ confidentiality ➤ own skills and limitations
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • conduct an initial casualty assessment

	<ul style="list-style-type: none"> • plan an appropriate first aid response in line with established first aid principles, policies and procedures, ERC Guidelines regulations, legislation and policies and industry requirements and respond appropriately to contingencies in line with own skills • demonstrate correct procedures for performing CPR using a manikin, including standard precautions • apply first aid principles • infection control, including use of standard precautions • follow OHS guidelines • safe manual handling • consideration of the welfare of the casualty • ability to call an ambulance • site management to prevent further injury • provide assistance with self-medication as per subject's own medication regime and in line with state/territory legislation, regulations and policies and any available medical/pharmaceutical instructions • administer medication in line with state/territory regulations, legislation and policies • prepare a written incident report or provide information to enable preparation of an incident report • communicate effectively and assertively in an incident • make prompt and appropriate decisions relating to managing an incident in the workplace • call an ambulance and/or medical assistance according to relevant circumstances and report casualty's condition • use literacy and numeracy skills as required to read, interpret and apply guidelines and protocols • evaluate own response and identify appropriate improvements where required
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation	
Unit Title	Monitor Implementation of Work Plan/Activities
Unit Code	AGR FME3 21 0714
Unit Descriptor	This unit covers competence required to oversee and monitor the quality of work operations within an enterprise. This unit may be carried out by team leaders or supervisors.

Elements	Performance Criteria
1. Monitor and improve workplace operations	<p>1.1 Efficiency and service levels are monitored on an ongoing basis.</p> <p>1.2 Operations in the workplace have been supported overall enterprise goals and quality assurance initiatives.</p> <p>1.3 Quality problems and issues are promptly identified and adjustments made accordingly.</p> <p>1.4 Procedures and systems are changed in consultation with colleagues to improve efficiency and effectiveness.</p> <p>1.5 Colleagues are consulted about ways to improve efficiency and service levels.</p>
2. Plan and organise workflow	<p>2.1 Current workload of colleagues is accurately assessed.</p> <p>2.2 Work is scheduled in a manner which enhances efficiency and customer service quality.</p> <p>2.3 Work is delegated to appropriate people in accordance with principles of delegation.</p> <p>2.4 Workflow is assessed against agreed objectives and timelines and colleagues are assisted in prioritisation of workload.</p> <p>2.5 Input regarding staffing needs is provided to appropriate management.</p>
3. Maintain workplace records	<p>3.1 Workplace records are accurately completed and submitted within required timeframes.</p> <p>3.2 Where appropriate, completion of records is delegated and monitored prior to submission.</p>
4. Solve problems and make decisions	<p>4.1 Workplace problems are promptly identified and considered from an operational and customer service perspective.</p> <p>4.2 Short term action is initiated to resolve the immediate problem where appropriate.</p> <p>4.3 Problems are analysed for any long term impact and potential solutions assessed and actioned in consultation with relevant colleagues.</p> <p>4.4 Where problem is raised by a team member, they are encouraged to participate in solving the problem.</p> <p>4.5 Follow up action is taken to monitor the effectiveness of solutions in the workplace.</p>

Variables	Range
Problems	May include but not limited to: <ul style="list-style-type: none"> • difficult customer service situations • equipment breakdown/technical failure • delays and time difficulties • competence
Workplace records	May include but is not limited to: <ul style="list-style-type: none"> • staff records and regular performance reports

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> • ability to effectively monitor and respond to a range of common operational and service issues in the workplace • understanding of the role of staff involved in workplace monitoring • knowledge of quality assurance, principles of workflow planning, delegation and problem solving
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • roles and responsibilities in monitoring work operations • overview of leadership and management responsibilities • principles of work planning and principles of delegation • typical work organization methods appropriate to the sector • quality assurance principles and time management • problem solving and decision making processes • industrial and/or legislative issues which affect short term work organization as appropriate to industry sector
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • monitor and improve workplace operations • plan and organize workflow • maintain workplace records
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Apply Quality Control
Unit Code	AGR FME3 22 0714
Unit Descriptor	This unit covers the knowledge, attitudes and skills required in applying quality control in the workplace.

Elements	Performance Criteria
1. Implement quality standards	1.1 Agreed quality standard and procedures are acquired and confirmed. 1.2 Standard procedures are introduced to organizational staff/personnel. 1.3 Quality standard and procedures documents are provided to employees in accordance with the organization policy. 1.4 Standard procedures are revised / updated when necessary.
2. Assess quality of service delivered	2.1 Services delivered are quality checked against organization quality standards and specifications. 2.2 Service delivered are evaluated using the appropriate evaluation quality parameters and in accordance with organization standards. 2.3 Causes of any identified faults are identified and corrective actions taken in accordance with organization policies and procedures.
3. Record information	3.1 Basic information on the quality performance is recorded in accordance with organization procedures. 3.2 Records of work quality are maintained according to the requirements of the organization.
4. Study causes of quality deviations	4.1 Causes of deviations from final outputs or services are investigated and reported in accordance with organization procedures. 4.2 Suitable preventive action is recommended based on organization quality standards and identified causes of deviation from specified quality standards of final service or output.
5. Complete documentation	5.1 Information on quality and other indicators of service performance is recorded. 5.2 All service processes and outcomes are recorded.

Variable	Range
Quality check	May include but not limited to: <ul style="list-style-type: none"> • Check against design / specifications • Visual inspection and Physical inspection
Quality standards	May include but not limited to: <ul style="list-style-type: none"> • Materials • Components

	<ul style="list-style-type: none"> • Process • Procedures
Quality parameters	May include but not limited to: <ul style="list-style-type: none"> • Standard Design / Specifications • Material Specification

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> • Check completed work continuously against organization standard • Identify and isolate faulty or poor service • Check service delivered against organization standards • Identify and apply corrective actions on the causes of identified faults or error • Record basic information regarding quality performance • Investigate causes of deviations of services against standard • Recommend suitable preventive actions
Underpinning Knowledge	Demonstrates knowledge of: <ul style="list-style-type: none"> • Relevant quality standards, policies and procedures • Characteristics of services • Safety environment aspects of service processes • Evaluation techniques and quality checking procedures • Workplace procedures and reporting procedures
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> • interpret work instructions, specifications and standards appropriate to the required work or service • carry out relevant performance evaluation • maintain accurate work records • meet work specifications and requirements • communicate effectively within defined workplace procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Lead Workplace Communication
Unit Code	AGR FME3 23 0714
Unit Descriptor	This unit covers the knowledge, attitudes and skills needed to lead in the dissemination and discussion of information and issues in the workplace.

Elements	Performance Criteria
1. Communicate information about workplace processes	1.1 Appropriate communication method is selected. 1.2 Multiple operations involving several topics areas are communicated accordingly. 1.3 Questions are used to gain extra information. 1.4 Correct sources of information are identified. 1.5 Information is selected and organized correctly. 1.6 Verbal and written reporting is undertaken when required. 1.7 Communication skills are maintained in all situations.
2. Lead workplace discussion	2.1 Response to workplace issues is sought. 2.2 Response to workplace issues are provided immediately. 2.3 Constructive contributions are made to workplace discussions on such issues as production, quality and safety. 2.4 Goals/objectives and action plan undertaken in the workplace are communicated.
3. Identify and communicate issues arising in the workplace	3.1 Issues and problems are identified as they arise. 3.2 Information regarding problems and issues are organized coherently to ensure clear and effective communication. 3.3 Dialogue is initiated with appropriate staff/personnel. 3.4 Communication problems and issues are raised as they arise.

Variable	Range
Methods of communication	May include but not limited to: <ul style="list-style-type: none"> • Non-verbal gestures • Verbal • Face to face • Two-way radio • Speaking to groups • Using telephone • Written • Using Internet • Cell phone

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • Deal with a range of communication/information at one time • Make constructive contributions in workplace issues • Seek workplace issues effectively • Respond to workplace issues promptly • Present information clearly and effectively written form • Use appropriate sources of information • Ask appropriate questions • Provide accurate information
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Organization requirements for written and electronic communication methods • Effective verbal communication methods
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Organize information • Understand and convey intended meaning • Participate in variety of workplace discussions • Comply with organization requirements for the use of written and electronic communication methods
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Lead Small Teams
Unit Code	AGR FME3 24 0714
Unit Descriptor	This unit covers the skills, knowledge and attitudes required to determine individual and team development needs and facilitate the development of the work group.

Elements	Performance Criteria
1. Provide team leadership	<p>1.1 Learning and development needs are systematically identified and implemented in line with organizational requirements.</p> <p>1.2 Learning plan is collaboratively developed and implemented to meet individual and group training and developmental needs.</p> <p>1.3 Individuals are encouraged to self-evaluate performance and areas identified for improvement.</p> <p>1.4 Feedback on performance of team members is collected from relevant sources and compared with established team learning process.</p>
2. Foster individual and organizational growth	<p>2.1 Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of competence standards.</p> <p>2.2 Learning delivery methods are made appropriate to the learning goals, the learning style of participants and availability of equipment and resources.</p> <p>2.3 Workplace learning opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies.</p> <p>2.4 Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.</p>
3. Monitor and evaluate workplace learning	<p>3.1 Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements.</p> <p>3.2 Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support.</p> <p>3.3 Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning.</p> <p>3.4 Records and reports of competence are maintained within organizational requirement.</p>
4. Develop team commitment and cooperation	<p>4.1 Open communication processes are used by team to obtain and share information.</p>

	<p>4.2 Decisions are reached by the team in accordance with its agreed roles and responsibilities.</p> <p>4.3 Mutual concern and camaraderie are developed in the team.</p>
5. Facilitate accomplishment of organizational goals	<p>5.1 Team members are made actively participatory in team activities and communication processes.</p> <p>5.2 Individual and joint responsibility has been developed teams members for their actions.</p> <p>5.3 Collaborative efforts are sustained to attain organizational goals.</p>

Variable	Range
Learning and development needs	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Coaching, mentoring and/or supervision • Formal/informal learning program • Internal/external training provision • Work experience/exchange/opportunities • Personal study • Career planning/development • Performance appraisals • Workplace skills assessment • Recognition of prior learning
Organizational requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Quality assurance and/or procedures manuals • Goals, objectives, plans, systems and processes • Legal and organizational policy/guidelines and requirements • Safety policies, procedures and programs • Confidentiality and security requirements • Business and performance plans • Ethical standard • Quality and continuous improvement processes and standards
Feedback on performance	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Formal/informal performance appraisals • Obtaining feedback from supervisors and colleagues • Obtaining feedback from clients • Personal and reflective behavior strategies • Routine and organizational methods for monitoring service delivery
Learning delivery methods	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • On the job coaching or mentoring • Problem solving • Presentation/demonstration • Formal course participation • Work experience and Involvement in professional networks • Conference/seminar attendance and induction

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • identify and implement learning opportunities for others • give and receive feedback constructively • facilitate participation of individuals in the work of the team • negotiate learning plans to improve the effectiveness of learning • prepare learning plans to match skill needs • access and designate learning opportunities
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • coaching and mentoring principles • understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective • understanding how to facilitate team development and improvement • understanding methods and techniques for eliciting and interpreting feedback • understanding methods for identifying and prioritizing personal development opportunities and options • knowledge of career paths and competence standards in the industry
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • read and understand a variety of texts, prepare general information and documents according to target audience; spell with accuracy; use grammar and punctuation effective relationships and conflict management • receive feedback and report, maintain effective relationships and conflict management • organize required resources and equipment to meet learning needs • provide support to colleagues • organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes • facilitation skills to conduct small group training sessions • relate to people from a range of social, cultural, physical and mental backgrounds
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Improve Business Practice
Unit Code	AGR FME3 25 0714
Unit Descriptor	This unit covers the skills, knowledge and attitudes required in promoting, improving and growing business operations.

Elements	Performance Criteria
1. Diagnose the business	1.1 Data required for diagnosis is determined and acquired. 1.2 Competitive advantage of the business is determined from the data. 1.3 SWOT analysis of the data is undertaken.
2. Benchmark the business	2.1 Sources of relevant benchmarking data are identified. 2.2 Key indicators are selected for benchmarking in consultation with key stakeholders. 2.3 Like indicators of own practice are compared with benchmark indicators. 2.4 Areas are identified for improvement.
3. Develop plans to improve business performance	3.1 A consolidated list of required improvements is developed. 3.2 Cost-benefit ratios are determined for required improvements. 3.3 Work flow changes resulting from proposed improvements are determined. 3.4 Proposed improvements are ranked according to agreed criteria. 3.5 An action plan is developed and agreed to implement the top ranked improvements. 3.6 Organizational structures are checked to ensure they are suitable.
4. Develop marketing and promotional plans	4.1 The practice vision statement is reviewed. 4.2 Practice objectives are developed/ reviewed. 4.3 Target markets are identified/ refined. 4.4 Market research data is obtained. 4.5 Competitor analysis is obtained. 4.6 Market position is developed/ reviewed. 4.7 Practice brand is developed. 4.8 Benefits of practice/practice products/services are identified. 4.9 Promotion tools are selected/ developed.
5. Develop business growth plans	5.1 Plans are developed to increase yield per existing client . 5.2 Plans are developed to add new clients. 5.3 Proposed plans are ranked according to agreed criteria.

	<p>5.4 An action plan is developed and agreed to implement the top ranked plans.</p> <p>5.5 Practice work practices are reviewed to ensure they support growth plans.</p>
6. Implement and monitor plans	<p>6.1 Implementation plan is developed in consultation with all relevant stakeholders.</p> <p>6.2 Indicators of success of the plan are agreed.</p> <p>6.3 Implementation is monitored against agreed indicators.</p> <p>6.4 Implementation is adjusted as required.</p>

Variable	Range
Data required	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • organization capability • appropriate business structure • level of client service which can be provided • internal policies, procedures and practices • staff levels, capabilities and structure • market, market definition • market changes/market segmentation • market consolidation/fragmentation • revenue • level of commercial activity • expected revenue levels, short and long term • revenue growth rate • break even data • pricing policy • revenue assumptions • business environment • economic conditions • social factors • demographic factors • technological impacts • political/legislative/regulative impacts • competitors, competitor pricing and response to pricing • competitor marketing/branding • competitor products
Competitive advantage	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • services/products • fees • location • timeframe
SWOT analysis	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • internal strengths such as staff capability, recognized quality • internal weaknesses such as poor morale, under-capitalization, poor technology • external opportunities such as changing market

	<ul style="list-style-type: none"> • economic conditions • external threats such as industry fee structures, strategic alliances, competitor marketing
Key indicators	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • salary cost and staffing • personnel productivity (particularly of principals) • profitability • fee structure • client base • size staff/principal • overhead/overhead control
Organizational structures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Legal structure (partnership, Limited Liability Company, etc.) • organizational structure/hierarchy • reward schemes
Objectives should be 'SMART'	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • S: Specific • M: Measurable • A: Achievable • R: Realistic • T: Time defined
Market research data	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • data about existing clients • data about possible new clients • data from internal sources • data from external sources such as: <ul style="list-style-type: none"> ➤ trade associations/journals ➤ Yellow Pages small business surveys ➤ libraries ➤ Internet ➤ Chamber of Commerce ➤ client surveys ➤ industry reports ➤ secondary market research • primary market research such as: <ul style="list-style-type: none"> ➤ telephone surveys ➤ personal interviews ➤ mail surveys
Competitor analysis	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • competitor offerings • competitor promotion strategies and activities • competitor profile in the market place
Market position	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • product • the good or service provided • product mix • the core product - what is bought • the tangible product - what is perceived • the augmented product - total package of consumer • features/benefits

	<ul style="list-style-type: none"> • product differentiation from competitive products • new/changed products • Price and pricing strategies (cost plus, supply/demand, ability to pay, etc.) • Pricing objectives (profit, market penetration, etc.) • cost components • market position • distribution strategies • marketing channels • promotion • promotional strategies • target audience • communication • promotion budget
Practice brand	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • practice image • practice logo/letter head/signage • phone answering protocol • facility decor • slogans • templates for communication/invoicing • style guide • writing style • AIDA (Attention, Interest, Desire, Action)
Benefits	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • features as perceived by the client • benefits as perceived by the client
Promotion tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • networking and referrals • seminars • advertising • press releases • publicity and sponsorship • brochures • newsletters (print and/or electronic) • websites • direct mail and telemarketing/cold calling
Yield per existing client	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • raising charge out rates/fees • packaging fees • reduce discounts • sell more services to existing clients

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • ability to identify the key indicators of business performance • ability to identify the key market data for the business • knowledge of a wide range of available information sources • ability to acquire information not readily available within a business
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	<ul style="list-style-type: none"> • ability to analyze data and determine areas of improvement • ability to negotiate required improvements to ensure implementation • ability to evaluate systems against practice requirements and form recommendations and/or make recommendations • ability to assess the accuracy and relevance of information
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • data analysis • communication skills • computer skills to manipulate data and present information • negotiation skills • problem solving • planning skills • marketing principles • ability to acquire and interpret relevant data • current product and marketing mix • use of market intelligence • development and implementation strategies of promotion and growth plans
Underpinning Skills	<p>Demonstrates skill in:</p> <ul style="list-style-type: none"> • data analysis and manipulation • ability to acquire and interpret required data, current practice systems and structures and sources of relevant benchmarking data • applying methods of selecting relevant key benchmarking indicators • communication skills • working and consulting with others when developing plans for the business • planning skills, negotiation skills and problem solving • using computers to manipulate, present and distribute information
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level III	
Unit Title	Prevent and Eliminate MUDA
Unit Code	AGR FME3 26 0714
Unit Descriptor	This unit of competence covers the knowledge, skills and attitude required by a worker to prevent and eliminate MUDA/wastes in his/her workplace. It covers responsibility for the day-to-day operation of the work and ensures Kaizen elements are continuously improved and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	<p>1.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>1.2 Job specifications are read and interpreted following working manual.</p> <p>1.3 OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>1.4 Appropriate material is selected for work.</p> <p>1.5 Safety equipment and tools are identified and checked for safe and effective operation.</p>
2. Identify MUDA.	<p>2.1 Plan of MUDA identification is prepared and implemented.</p> <p>2.2 Causes and effects of MUDA are discussed.</p> <p>2.3 Tools and techniques are used to draw and analyze current situation of the work place.</p> <p>2.4 Wastes/MUDA are identified and measured based on relevant procedures.</p> <p>2.5 Identified and measured wastes are reported to relevant personnel.</p>
3. Eliminate wastes/MUDA.	<p>3. 1. Plan of MUDA elimination is prepared and implemented.</p> <p>3. 2. Necessary attitude and the ten basic principles for improvement are adopted to eliminate waste/MUDA.</p> <p>3. 3. Tools and techniques are used to eliminate wastes/MUDA based on the procedures and OHS.</p> <p>3. 4. Wastes/MUDA are reduced and eliminated in accordance with OHS and organizational requirements.</p> <p>3. 5. Improvements gained by elimination of waste/MUDA are reported to relevant bodies.</p>
4. Prevent occurrence of wastes/MUDA.	<p>4.1 Plan of MUDA prevention is prepared and implemented.</p> <p>4.2 Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement are discussed and prepared.</p>

	<p>4.3 Occurrences of wastes/MUDA are prevented by using visual and auditory control methods.</p> <p>4.4 Waste-free workplace is created using 5W and 1H sheet.</p> <p>4.5 The completion of required operation is done in accordance with standard procedures and practices.</p> <p>4.6 The updating of standard procedures and practices is facilitated.</p> <p>4.7 The capability of the work team that aligns with the requirements of the procedure is ensured.</p>
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Variable	Range
OHS requirements	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances. • Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices. • Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization. • Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation.
Safety equipment and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • dust masks / goggles • glove • working cloth • first aid • safety shoes
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Plant Layout • Process flow • Other Analysis tools • Do time study by work element • Measure Travel distance • Take a photo of workplace • Measure Total steps • Make list of items/products, who produces them and who uses them & those in warehouses, storages etc. • Focal points to Check and find out existing problems • 5S • Layout improvement • Brainstorming

	<ul style="list-style-type: none"> • Andon • U-line • In-lining • Unification • Multi-process handling & Multi-skilled operators • A.B. control (Two point control) • Cell production line • TPM (Total Productive Maintenance)
Relevant procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Make waste visible • Be conscious of the waste • Be accountable for the waste. • Measure the waste.
The ten basic principles for improvement	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Throw out all of your fixed ideas about how to do things. • Think of how the new method will work- not how it won. • Don't accept excuses. Totally deny the status quo. • Don't seek perfection. A 50 percent implementation rate is fine as long as it's done on the spot. • Correct mistakes the moment they are found. • Don't spend a lot of money on improvements. • Problems give you a chance to use your brain. • Ask "why?" At least five times until you find the ultimate cause. • Ten people's ideas are better than one person's. • Improvement knows no limits.
Visual and auditory control methods	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Red Tagging • Sign boards • Outlining • Andons • Kanban, etc.
5W and 1H	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Who • What • Where • When • Why • How

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • discuss why wastes occur in the workplace • discuss causes and effects of wastes/MUDA in the workplace • analyze the current situation of the workplace by using appropriate tools and techniques • identify, measure, eliminate and prevent occurrence of wastes by using appropriate tools and techniques • use 5W and 1H sheet to prevent
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Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Targets of customers and manufacturer/service provider • Traditional and kaizen thinking of price setting • Kaizen thinking in relation to targets of manufacturer/service provider and customer • value • The three categories of operations • the 3“MU” • waste/MUDA • wastes occur in the workplace • The 7 types of MUDA • The Benefits of identifying and eliminating waste • Causes and effects of 7 MUDA • Procedures to identify MUDA • Necessary attitude and the ten basic principles for improvement • Procedures to eliminate MUDA • Prevention of wastes • Methods of waste prevention • Definition and purpose of standardization • Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement • Methods of visual and auditory control • TPM concept and its pillars. • Relevant Occupational Health and Safety (OHS) and environment requirements • Plan and report • Method of communication
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • draw & analyze current situation of the work place • use measurement apparatus (stop watch, tape, etc.) • calculate volume and area • use and follow checklists to identify, measure and eliminate wastes/MUDA • identify and measure wastes/MUDA in accordance with OHS and procedures • use tools and techniques to eliminate wastes/MUDA in accordance with OHS procedure • apply 5W and 1H sheet • update and use standard procedures for completion of required operation • work with others • read and interpret documents • observe situations • solve problems • communicate • gather evidence by using different means • report activities and results using report formats

Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

NTQF Level IV

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Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Implement Operational Plan
Unit Code	AGR FME4 01 0714
Unit Descriptor	This unit covers skills and knowledge required to implement the operational plan by monitoring and adjusting operational performance, producing short term plans for the department/section, planning and acquiring resources and providing reports on performance as required. This key role is carried out to provide safe, efficient and effective products and services to customer satisfaction within the organisation's productivity and profitability plans. At this level, work will normally be carried out within routine and non routine methods and procedures, which require planning, evaluation, leadership and guidance of others.

Elements	Performance Criteria
1. Implement operational plan	<p>1.1 Details of resource requirements are collated, analysed and organised in consultation with relevant personnel, colleagues and specialist resource managers.</p> <p>1.2 Operational plans of farm operation are implemented to contribute to the achievement of organisation's performance/business plan.</p> <p>1.3 Key Performance Indicators (KPIs) are identified and used to monitor farm machinery operational performance.</p> <p>1.4 Contingency planning and consultation processes are undertaken as per organization guideline.</p> <p>1.5 Assistance is provided in the development and presentation of proposals for resource requirements in line with farm machinery operational planning processes.</p>
2. Implement resource acquisition	<p>2.1 Employees are recruited and inducted within organisation's policies, practices and procedures.</p> <p>2.2 Farm machinery operational plans are implemented for acquisition of physical resources and services within organisation's policies, practices and procedures and in consultation with relevant personnel.</p>
3. Monitor operational performance	<p>3.1 Performance systems and processes are monitored to assess progress in achieving profit/productivity plans and targets.</p> <p>3.2 Budget and actual financial information are analysed and used to monitor profit/productivity performance.</p> <p>3.3 Unsatisfactory performance is identified and prompt action is taken to rectify the situation according to organisational policies.</p> <p>3.4 Mentoring, coaching and supervision are provided to support individuals and teams to use resources effectively, economically and safely.</p>

	<p>3.5 Recommendations for variation to operational plans are presented to the designated persons/groups and approval is gained.</p> <p>3.6 Systems, procedures and records associated with performance are implemented in accordance with organisation's requirements.</p>
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Variable	Range
Resource requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • goods and services to be purchased and ordered • human, physical and financial resources - both current and projected • stock requirements and requisitions
Relevant personnel, colleagues and specialist resource managers	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • colleagues and resource managers • managers • occupational health and safety committees and other people with specialist responsibilities • other employees, customers • supervisors
Operational plans	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • organisational plans • tactical plans developed by the department or section to detail product and service performance
Key Performance Indicators (KPIs)	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • measures for monitoring or evaluating the efficiency or effectiveness of a system, and which may be used to demonstrate accountability and to identify areas for improvements
Contingency planning	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • contracting out or outsourcing human resources and other functions or tasks • diversification of outcomes • finding cheaper or lower quality raw materials and consumables • increasing sales or production • recycling and re-use • rental, hire purchase or alternative means of procurement of required materials, equipment and stock • restructuring of organisation to reduce labour costs • risk identification, assessment and management processes • seeking further funding • strategies for reducing costs, wastage, stock or consumables • succession planning
Consultation processes	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • mechanisms used to provide feedback to the work team in relation to outcomes of consultation

	<ul style="list-style-type: none"> meetings, interviews, brainstorming sessions, email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual operational plans
Organisation's policies, practices and procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> organisational culture Standard Operating Procedures organisational guidelines which govern and prescribe operational functions, such as the acquisition and management of human and physical resources undocumented practices in line with organisational operations
Performance systems and processes	<p>May include but not limited to:</p> <ul style="list-style-type: none"> informal systems used by frontline managers for the work team in the place of existing organisation-wide systems formal processes within the organisation to measure performance, such as: <ul style="list-style-type: none"> ➤ feedback arrangements ➤ individual and teamwork plans ➤ KPIs ➤ specified work outcomes
Designated persons/groups	<p>May include but not limited to:</p> <ul style="list-style-type: none"> other affected work groups or teams and groups designated in workplace policies and procedures those who have the authority to make decisions and/or recommendations about operations such as workplace supervisors, other managers
Systems, procedures and records	<p>May include but not limited to:</p> <ul style="list-style-type: none"> databases and other recording mechanisms for ensuring records are kept in accordance with organisational requirements individual and team performance plans organisational policies and procedures relative to performance

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> ability to monitor and adjust operational performance, produce short-term plans for the department or section, plan and acquire resources, and provide reports on performance as required knowledge of principles and techniques associated with monitoring and implementing operations and procedures
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> principles and techniques associated with: <ul style="list-style-type: none"> ➤ contingency planning ➤ methods for monitoring and reporting on performance ➤ monitoring and implementing operations and procedures ➤ problem identification and methods of resolution

	<ul style="list-style-type: none"> ➤ relevant budgeting and financial analysis, interpretation and reporting requirements ➤ resource management systems at the tactical implementation level ➤ resource planning and acquisition ➤ tactical risk analysis including identification and reporting requirements
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • coaching and mentoring skills to provide support to colleagues • literacy skills to access and use workplace information, and to prepare reports • planning and organising skills to monitor performance and to sequence work of self and others to achieve planned outcomes
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Perform Calibration Checks on Equipment
Unit Code	AGR FME4 02 0714
Unit Descriptor	This unit covers the ability to perform setup, pre-use and in-house calibration checks on equipment and assist with its maintenance. Industry representatives have provided case studies to illustrate the practical application of this unit and to show its relevance in a workplace setting.

Elements	Performance Criteria
1. Perform setup and pre-use checks of farm equipment	1.1 Workplace information sources are accessed and procedures strictly adhered. 1.2 Farm machinery and equipment setup and pre-use checks are performed in accordance with enterprise procedures. 1.3 Safety checks are performed in accordance with relevant enterprise and instrumental procedures. 1.4 Faulty or unsafe components and equipment are identified and reported to appropriate personnel. 1.5 Equipment log books/records are completed to meet enterprise requirements.
2. Perform calibration checks	2.1 Machinery and equipment start up is done according to operating procedures. 2.2 Specified standards are used for calibration check. 2.3 Machinery and equipment are checked as per calibration procedures and schedules. 2.4 All calibration data are recorded accurately and legibly. 2.5 Result data is compared with specifications and/or previous records to identify non-compliant equipment. 2.6 Calibrated equipment is quarantined out as per organizational guideline.
3. Assist with equipment maintenance	3.1 Work areas are ensured and all machinery and equipment cleaned during and after use. 3.2 Basic maintenance and adjustments are performed in accordance with enterprise procedures. 3.3 Machinery and equipment are cleaned and stored according to enterprise and/or manufacturer's specifications/procedures. 3.4 Damaged/worn out equipment parts are identified and replaced, repaired or disposed of as appropriate.
4. Maintain records	4.1 Information on unsafe or faulty equipment is recorded in standard format to be communicated to relevant personnel according to enterprise procedures. 4.2 Documented information on unsafe or faulty equipment is reported according to enterprise procedures.

Variable	Range
Equipment	<p>may include:</p> <ul style="list-style-type: none"> measuring tape- 2m, 3m,5m metal and 50m or 100m plastic table weighing balance calliper, adjustable wrenches, repair tool set graduated cylinder 2000ml plastic string-50m
Standards	<p>May include:</p> <ul style="list-style-type: none"> calibration check and maintenance schedules enterprise recording and reporting procedures equipment manuals equipment start up, operation and shutdown procedures Material Safety Data Sheets (MSDS) material, production and product specifications national measurement regulations and guidelines OHS national standards and codes of practice quality manuals Standard Operating Procedures (SOPs)
Occupational Health and Safety (OHS) and environmental management requirements	<p>May include:</p> <ul style="list-style-type: none"> all operations must comply with OHS and environmental management requirements, which may be imposed through federal legislation - these requirements must not be compromised at any time all operations assume the potentially hazardous nature of farm machinery operations and require standard precautions to be applied where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Nutrition Research Institute(NHNRI) and Ministry of Health

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> perform setup pre-use checks and shutdown procedures perform calibration checks of basic equipment using standard procedures obtain readings of the required accuracy and precision recognise non-standard behaviour of instruments/equipment assist with maintaining equipment in working order by performing basic maintenance tasks follow all relevant OHS requirements follow enterprise recording and reporting procedures
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> operational principles and methods for equipment use basic sources of error in equipment operation and their control role and importance of correct calibration basic equipment maintenance procedures

	<ul style="list-style-type: none"> • enterprise communication and reporting procedures • relevant OHS and environment requirements
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • performing setup, pre-use checks and shutdown procedures • performing calibration checks of basic equipment using standard procedures • obtaining readings of the required accuracy and precision • identifying non-compliant equipment from specifications and/or previous checks • recognising non-standard behaviour of instruments • assisting with maintaining equipment in working order by performing basic maintenance tasks • following all relevant Occupational Health and Safety (OHS) requirements • following enterprise recording and reporting procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Identify Risk and Apply Risk Management Processes
Unit Code	AGR FME4 03 0714
Unit Descriptor	This unit covers skills and knowledge required to identify risks and to apply established risk management processes to a subset of an organisation or project's operations that are within the person's own work responsibilities and area of operation. This unit applies to individuals with a broad knowledge of risk analysis or project management who contribute well developed skills in creating solutions to unpredictable problems through analysis and evaluation of information from a variety of sources. They may have responsibility to provide guidance or to delegate aspects of these tasks to others. In this unit, risks applicable within own work responsibilities and area of operation, may include projects being undertaken individually or by a team, or operations within a section of the organisation.

Elements	Performance Criteria
1. Identify risks	<p>1.1 The context for risk management is identified as per organizational operating procedures.</p> <p>1.2 Risks are identified using tools, ensuring all reasonable steps have been taken to identify all risks.</p> <p>1.3 Identified risks are documented in accordance with relevant policies, procedures and legislation.</p>
2. Analyse and evaluate risks	<p>2.1 Risks are analysed and documented in consultation with relevant stakeholders.</p> <p>2.2 Risk categorisation is undertaken and level of risk determined as per set organizational criteria.</p> <p>2.3 Analysis processes and outcomes are documented in standard format.</p>
3. Treat risks	<p>3.1 Appropriate control measures for risks are determined and assessment is conducted for strengths and weaknesses.</p> <p>3.2 Control measures for all risks are identified according to organizational nature.</p> <p>3.3 Risks relevant to whole of organisation or having an impact beyond own work responsibilities and area of operation are referred to others as per established policies and procedures.</p> <p>3.4 Control measures for own area of operation and/or responsibilities are chosen and implemented.</p> <p>3.5 Treatment plans are prepared and implemented in accordance to organizational guideline.</p>
4. Monitor and review	<p>4.1 Implemented treatment/s is/are regularly reviewed against measures of success.</p>

effectiveness of risk treatment/s	<p>4.2 Review results are used to improve the treatment of risks.</p> <p>4.3 Assistance is provided to auditing risk in own area of operation.</p> <p>4.4 Management of risk in own area of operation is monitored and reviewed.</p>
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Variable	Range
Context	<p>May include:</p> <ul style="list-style-type: none"> • any related projects or organisations • any resources, including physical assets, which are vital to operations • key operational elements and service of the organisation • organisation or project, how it is organised and its capabilities • own role and responsibilities in relation to overall project or organisation design
Risks	<p>May include:</p> <ul style="list-style-type: none"> • commercial and legal relationships • economic circumstances and scenarios • human behaviour • individual activities • management activities and controls • natural events • positive risk • technology - technological issues
Tools	<p>May include:</p> <ul style="list-style-type: none"> • documentation to assist in process of identifying risk, and assessing impact and likelihood of occurrence • standard instruments developed for the organisation and contextualised for sections of the workplace's operations, such as checklists and testing procedures • tools to prioritise risks, including where relevant, numerical scoring systems for risks
Stakeholders	<p>May include:</p> <ul style="list-style-type: none"> • contractors • employees • financial managers • insurance agents • managers • public • service providers • suppliers • unions • volunteers
Risk categorisation	<p>May Include:</p> <ul style="list-style-type: none"> • likelihood of risks: <ul style="list-style-type: none"> ➤ almost certain ➤ likely ➤ possible

	<ul style="list-style-type: none"> ➤ unlikely ➤ rare • consequences of risks: <ul style="list-style-type: none"> ➤ insignificant ➤ minor ➤ moderate ➤ major ➤ catastrophic ➤ current control measures
Level of risk	<p>May include:</p> <ul style="list-style-type: none"> • low, treated with routine procedures • moderate, with specific responsibility allocated for the risk, and monitoring and response procedures implemented • high, requiring action, as it has potential to be damaging to the organisation or project • extreme, requiring immediate action, as it has potential to be devastating to the organisation or project
Control measures	<p>May include:</p> <ul style="list-style-type: none"> • hierarchy of controls: <ul style="list-style-type: none"> ➤ reduction in likelihood of risks ➤ reduction of consequences of risks ➤ retention of risks ➤ risk aversion ➤ transfer of responsibility of risks
Measures of success	<p>May include:</p> <ul style="list-style-type: none"> • costs • reductions in impact • reductions in likelihood • reductions in occurrence

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • identification, analysis and evaluation of risks • demonstrated understanding of personal role in relation to wider organisational or project context • demonstrated understanding of risk management processes and procedures
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Ethiopian and international standards for risk management • key provisions of relevant legislation from all levels of government that may affect aspects of business operations, such as: <ul style="list-style-type: none"> ➤ anti-discrimination legislation ➤ ethical principles ➤ codes of practice ➤ privacy laws ➤ environmental issues ➤ occupational health and safety • organisational policies and procedures relating to risk management processes and strategies • auditing requirements relating to risk management

Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • literacy skills sufficient to read and understand a variety of texts; and to write, edit and proofread documents to ensure clarity of meaning, accuracy and consistency of information • research and data collection skills to monitor and evaluate risks • problem-solving skills to appropriately address identified risks
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Supervise Agricultural Crop Establishment
Unit Code	AGR FME4 04 0714
Unit Descriptor	This unit covers the supervision of agricultural crop establishment and defines the standard required to: identify the seasonal conditions which affect crop establishment; plan the planting operation including timing and resources required; carry out machinery pest, weed and disease control either pre or post planting if required; supervise staff and monitor the planting operation; This unit applies to cropping managers and supervisors.

Elements	Performance Criteria
1. Source information for input to planting plan	<p>1.1 Documents within the organisation that detail the requirements of the crop production plan are identified and obtained.</p> <p>1.2 Information regarding activities that will be occurring at a similar time to planting is gathered through discussion with colleagues and management, and by reading the production/management plan.</p> <p>1.3 The specific target area, or paddock, for planting is identified from the production/management plan.</p> <p>1.4 Trash levels and seedbed conditions are assessed and accounted for in planning.</p>
2. Prepare planting plan	<p>2.1 The agricultural crop and method(s) of planting to be used are determined from the organisations production / management plan and availability.</p> <p>2.2 The resources required for the planting operations are assessed and calculated from the area to be sown, the method of planting to be used, and the available timelines.</p> <p>2.3 The target dates are set for planting, including the sequencing for planting across paddocks or crop areas, in line with the overall production/management planning for the organisation.</p> <p>2.4 The chemical applications that are required prior to and post planting are selected and organised to occur at an appropriate time.</p> <p>2.5 The plan is prepared to ensure that any potential detrimental environmental impacts, including the proper disposal of containers, drums and other waste are minimised or eliminated.</p> <p>2.6 Occupational Health and Safety (OHS) hazards are identified, assessed, and safe work practices for planting are implemented and overseen with staff.</p> <p>2.7 Any approvals that are required for the planting operations are identified, sought and obtained.</p>

	2.8 Measurable indicators, specifications and targets are determined based on the production/management plan and the method, resources, and seed to be used.
3. Determine scheduling and key responsibilities	<p>3.1 Scheduling for planting is determined by taking the range of geographic and resourcing factors into consideration, as well as operations that will be occurring at the same time as the planting.</p> <p>3.2 Key responsibilities for specific preparatory processes that are required are determined before planting.</p> <p>3.3 Key responsibilities are determined for specific implementation processes.</p> <p>3.4 Recordkeeping requirements are determined and procedures put in place to ensure compliance with the range of applicable regulations.</p> <p>3.5 The plan including scheduling and key responsibilities are clearly documented.</p> <p>3.6 The plan is made to include the type, format, frequency and detail of any reporting required by both managers and operators.</p>
4. Monitor and adjust the planting plan	<p>4.1 Monitoring points outlined in the implementation plan are adhered to.</p> <p>4.2 Checks are made to ensure that OHS procedures are being observed and followed.</p> <p>4.3 Checks are made to ensure that the site environmental requirements are being observed and followed.</p> <p>4.4 Operational staff and any contractors are communicated with regularly to ensure smooth operation and progress.</p> <p>4.5 Checks are made to ensure that the documentation required by the organisation, or other regulating bodies is completed clearly and accurately during the progress of the planting process.</p> <p>4.6 Where any corrective action or amendment to the planting plan is required, the action is initiated and taken.</p>

Variable	Range
Crop	May include: <ul style="list-style-type: none"> • wheat and coarse grains • cotton • grain legumes • oilseeds • sugar • temperate and tropical pastures
Information	May include farm machinery operation such as: <ul style="list-style-type: none"> • ploughing, harrowing, ridging, spraying, harvesting
Method(s)	May include: <ul style="list-style-type: none"> • seed drilling

	<ul style="list-style-type: none"> • row planting • broadcasting • cuttings and manual plantings
Resources	<p>May include:</p> <ul style="list-style-type: none"> • tractor • planters, seed drillers, broadcasters • fuel and lubricants • spare parts
Chemical applications	<p>May include:</p> <ul style="list-style-type: none"> • herbicides • insecticides • fungicides and soil fumigants/treatments
Potential detrimental environmental impacts	<p>May include:</p> <ul style="list-style-type: none"> • water point pollution • leftover containers and bags • wind drift of spray and seed dressing chemicals • damage to animals and birds • air pollution and inhaling dangers • erosion danger related to machinery routes • transportation of weeds and harmful plants
Occupational Health and Safety (OHS) hazards	<p>May include:</p> <ul style="list-style-type: none"> • sharp cutting tooling and instruments, • Torn or improper use personal protective equipments • Worn out repair tools • Servicing while engine is running • Working under machines not secured • unprotected moveable parts • toxic substances, • damaged packing material or containers, • broken or damaged equipment, • flammable materials and fire hazards, • lifting practices, • Stumps and logs in the soil or covered by debris • crash with tractors/trucks
Key responsibilities	<p>May include:</p> <ul style="list-style-type: none"> • plan dissemination and securing staff consensus • securing sufficient machinery stock with contingency • readiness of paddocks for planting • arrangement of maintenance crew • confirming machinery and equipment calibration • availability of personal protective equipment • organization of first aid services • machinery fleet organization • transportation of seeds and chemicals • transportation of machinery and camping

Evidence Guide

Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • identify the seasonal conditions which affect crop establishment
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	<ul style="list-style-type: none"> • plan the planting operation including timing and resources required • carry out pest, weed and disease control either pre or post planting if required • supervise staff and monitor the planting operation
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • the equipment that is required for a range of tillage methods, and pest and weed control prior to planting • crop establishment requirements • equipment servicing requirements • integrated pest and weed management techniques • environmental controls and codes of practice applicable to the enterprise • Legislation, codes of practice and enterprise procedures for OHS and environmental management • sound management practices and processes to minimise environmental impacts such as noise, soil degradation, and debris from planting operations
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and oversee safe operating procedures • identify the seasonal conditions which affect crop establishment • plan and schedule planting including amending plans during the operations • recognise poor growth and lack of vigour caused by nutrient deficiency and incorrect planting depth • observe, identify and react appropriately to environmental implications and OHS hazards • use literacy skills to read, interpret and follow organisational policies and procedures, develop sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record routine and more complex workplace measures and data • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Supervise Agricultural Crop Harvesting
Unit Code	AGR FME4 05 0714
Unit Descriptor	<p>This unit covers the supervision of agricultural crop harvesting and defines the standard required to: establish strategies, procedures and controls for crop harvesting, including fire prevention and control plans; negotiate and arrange contracts and agreements; estimate crop yields; maintain budgetary controls; assess crop maturity and quality in readiness for harvesting; arrange storage and delivery requirements; and segregate grain for quality and monitor for moisture content.</p> <p>This unit applies to farm managers and harvest supervisors whose work is likely to be carried out under broad supervision.</p>

Elements	Performance Criteria
1. Prepare for harvesting	<p>1.1 Crop maturity and quality are assessed in readiness for harvesting.</p> <p>1.2 Pre-harvest treatments are determined and carried out for the control and eradication of pests according to Occupational Health and Safety (OHS) requirements.</p> <p>1.3 Requirements are identified and complied with for licences or permits.</p> <p>1.4 Insurance requirements are assessed and risk management strategies planned and implemented as required.</p>
2. Determine harvest strategy	<p>2.1 Optimum timing is estimated and calculated to carry out agricultural crop harvest according to crop maturity assessment.</p> <p>2.2 Resource requirements are assessed by giving consideration to the size of the crop and estimated timing of harvest.</p> <p>2.3 Labour and equipment required are confirmed and arranged to carry out harvesting operations within budgetary constraints.</p> <p>2.4 Requirements are identified and arranged for fire prevention and control according to OHS requirements.</p>
3. Coordinate the harvest strategy	<p>3.1 Effective communication strategies are implemented to ensure smooth workflow operations and personnel safety.</p> <p>3.2 Harvesting operations are implemented and adjusted as required according to weather, equipment and staff requirements.</p> <p>3.3 Equipment operation is coordinated for maximum efficiency and monitored for performance effectiveness.</p> <p>3.4 Existing and potential hazards are identified and controlled according to OHS and enterprise requirements.</p>

4. Complete harvest operation	<p>4.1 Storage resources are located for efficient operations and strategies for drying grain identified, if necessary, according to marketing initiatives.</p> <p>4.2 Quality of grain is segregated to marketing grades and monitored for moisture content according to classification standards.</p> <p>4.3 Harvesting operations and outcomes are evaluated against harvest strategy.</p> <p>4.4 Relevant information is documented for continual analysis and effective planning management.</p>
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Variable	Range
Occupational Health and Safety (OHS) requirements	<p>are to be in accordance with applicable legislation and regulations, and organizational safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> • personal protective equipment and clothing • workplace environment and safety, safety equipment • enterprise first aid and first aid equipment • hazard and risk control and hazardous materials and substances electrical safety • elimination of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures • use of tooling and equipment • handling of material • use of fire fighting equipment
Optimum timing	<p>May be determined depending on crop type by:</p> <ul style="list-style-type: none"> • leaves and pod colour • seed moisture content • stokes moisture content and ball size and colour
Agricultural crop	<p>May include:</p> <ul style="list-style-type: none"> • wheat and coarse grains • cotton • grain legumes • oilseeds • sugar • Kenaf plant, Sisal • temperate and tropical pastures
Harvesting operations	<p>May include:</p> <ul style="list-style-type: none"> • combine harvesting • cutting and transporting • threshing-manual feeding • shelling-manual feeding • husking and decorticating
Hazards	<p>May result from but not limited to:</p> <ul style="list-style-type: none"> • sharp cutting tooling, auger, reel and instruments, • torn or improper use personal protective equipments • worn out repair tools, broken or damaged equipment, • servicing while engine is running

	<ul style="list-style-type: none"> • working under machines not secured • unprotected moveable parts-belts, chains, shafts • toxic substances, • unsafe use of repair tools • damaged packing material or containers, • flammable materials and fire hazards, • overheating • stumps and logs in the soil or covered by debris • crash with tractors/trucks
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Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • establish strategies, procedures and controls for crop harvesting, including fire prevention and control plans • negotiate and arrange contracts and agreements • estimate crop yields • maintain budgetary controls • assess crop maturity and quality in readiness for harvesting • arrange storage and delivery requirements • segregate grain for quality and monitor for moisture content
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • crop maturity and yield potential • grain or seed quality • functions and limitations of harvesting equipment • crop measurement techniques and parameters • market information and sources • location and relative skills and abilities of available contractors • weather conditions which may affect the harvest • relevant legislation, codes of practice and enterprise requirements for OHS, contractor engagement, environment and pesticides • environmental controls and codes of practice applicable to harvesting operations • supervisor responsibilities in managing the safety of a workplace
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • organise and schedule the maintenance of plant and equipment • establish strategies, procedures and controls for crop harvesting • negotiate and arrange contracts and agreements • implement safe workplace and positive environmental practices • deal with weather and other contingencies • use literacy skills to read, interpret and follow organisational policies and procedures, develop sequenced written instructions, record accurately and legibly information collected, and select and apply procedures to a range of tasks

	<ul style="list-style-type: none"> • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record routine and more complex workplace measures and data • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Coordinate Customer Service and Networking Activities
Unit Code	AGR FME4 06 0714
Unit Descriptor	This unit covers coordinating customer service and networking activities and defines the standard required to: access and apply customer service policies and procedures; respond to customer feedback and complaints; develop and use networks to source goods and services; provide value for the customer in sourcing and supplying goods and services; maintain records of customer feedback and interactions. This unit applies to agricultural or horticultural merchandise or department managers who have responsibility for customer service delivery by others.

Elements	Performance Criteria
1. Contribute to quality customer standards	<p>1.1 Customer service standards are accessed, interpreted, applied and monitored in the workplace in accordance with enterprise policies and procedures.</p> <p>1.2 Contributions are made to the development, refinement and improvement of service policies, standards and processes.</p>
2. Implement customer service systems	<p>2.1 All personnel are encouraged to consistently implement customer service systems.</p> <p>2.2 Customer feedback is reviewed in consultation with appropriate personnel and analysed when improving work practices.</p> <p>2.3 Customer service complaints are identified and adjustments made to ensure continued service quality.</p> <p>2.4 Adjustments are communicated to all those involved in service delivery within appropriate time frames.</p> <p>2.5 Delivery of services/products is coordinated and managed to ensure they effectively and efficiently meet agreed quality standards.</p>
3. Manage networks to ensure customer needs are addressed	<p>3.1 Effective regular communication is established with customers.</p> <p>3.2 Relevant networks are established, maintained and expanded to ensure appropriate referral of customers to products/services from within and outside the organization.</p> <p>3.3 Procedures are put in place to ensure that decisions about targeting of customer services are based on up-to-date information about the customer and the products/services available.</p> <p>3.4 Procedures are put in place to ensure that referrals are based on the matching of the assessment of customer needs and availability of products/services.</p>

	3.5 Records of customer interaction are maintained in accordance with organisational procedures.
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Variable	Range
Customer	May include: <ul style="list-style-type: none"> • customers with routine or special requests • regular and new customers • people from a range of social, cultural or ethnic backgrounds • people with varying physical and mental abilities
Relevant networks	May include: <ul style="list-style-type: none"> • agricultural or horticultural manufacturers and suppliers • industry associations • internal and external customers • government agencies and departments • specific interest or support groups • advisory committees • lobby groups • research bodies

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: <ul style="list-style-type: none"> • access and apply customer service policies and procedures • respond to customer feedback and complaints • develop and use networks to source goods and services • provide value for the customer in sourcing and supplying goods and services • maintain records of customer feedback and interactions
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • legislative and regulatory requirements may include but are not limited to: Consumer Law, Environmental Law, Occupational Health and Safety (OHS), Privacy Legislation, Codes of Conducts, Discrimination/Equal Employment Opportunity, Harassment and other laws specific to local government, Federal legislation • the organisation's business structure, products and services • customer service systems/procedures including the continuous quality improvement framework, together with some knowledge of the customer population and how the system applies to delivering customer service to that customer population • the principles of customer service • the principles of effective communication in relation to listening, questioning and non-verbal communication • the individual's role in delivering customer service • techniques for dealing with customers with special needs • techniques for building relationships of trust and mutually acceptable outcomes • related organisations, agencies and networks • the principles and operations of networks

Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds • clear, legible writing • language skills which allow for adequate communication with customer and all relevant personnel • literacy skills to the level required to read and write procedures and reports • numeracy skills to the level required to develop and implement customer service procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Supervise Work Routines and Staff Performance
Unit Code	AGR FME4 07 0714
Unit Descriptor	<p>This unit covers the supervision of work routines and staff performance and defines the standard required to: assess staff capability against position descriptions; designate and communicate staff roles and responsibilities, including line management; develop work plans to achieve organisational targets and business objectives; provide training and mentoring for staff; implement strategies to foster teamwork and trust; negotiate with staff as part of dealing with conflict; monitor team and individual work performance and provide feedback to staff.</p> <p>This unit applies to workers with supervisory responsibilities and covers the work functions associated with supervising work routines and staff performance.</p>

Elements	Performance Criteria
1. Communicate work roles	<p>1.1 Roles and responsibilities of staff are clearly defined and documented.</p> <p>1.2 Skills of staff are accurately identified and matched with available tasks and duties.</p> <p>1.3 Requirements of jobs are clearly identified and communicated to personnel.</p> <p>1.4 Information on activities is developed and provided to personnel.</p> <p>1.5 Occupational Health and Safety (OHS) policy and procedural requirements for supervisors are effectively implemented.</p>
2. Coordinate activities	<p>2.1 Work activities are prioritised to ensure completion of tasks in accordance with available timelines.</p> <p>2.2 Work plans are developed to establish targets and objectives of activities, and to define tasks and timelines.</p> <p>2.3 Training and learning opportunities are identified and incorporated into work activities.</p> <p>2.4 Supervisory and reporting responsibilities are clarified and maintained in line with organisational requirements.</p> <p>2.5 Enterprise environmental policy and procedures for supervisors are effectively implemented.</p>
3. Maintain effective working relations	<p>3.1 Problems are recognised and addressed through discussion with work group.</p> <p>3.2 Assistance is sought from work group members when difficulties arise in achieving allocated tasks</p> <p>3.3 Discussion and information sharing are routinely used to communicate requirements of work activities through a participative approach.</p>

	3.4 Disagreements and conflicts are managed constructively using appropriate conflict management strategies.
4. Provide feedback	<p>4.1 Feedback is made clear, constructive and provided promptly to individuals to support achievement of outcomes.</p> <p>4.2 Difficult situations are identified and negotiated to achieve results in line with organisational requirements.</p> <p>4.3 Team and individual performances are monitored regularly to ensure personnel are able to achieve goals.</p> <p>4.4 Supervisory structures and lines of reporting are maintained in accordance with organisational requirements.</p>

Variable	Range
Roles and responsibilities	<p>May include:</p> <ul style="list-style-type: none"> • compliance with organization policies, manuals, guidelines • fulfilling operational requirements • compliance with ohs requirements
OHS requirements	<p>are to be in accordance with applicable legislation and regulations, and organizational safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> • personal protective equipment and clothing • workplace environment and safety, safety equipment • enterprise first aid and first aid equipment • hazard and risk control and hazardous materials and substances electrical safety • elimination of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures • use of tooling and equipment, • handling of material, • use of fire fighting equipment,
The people	<p>May include:</p> <ul style="list-style-type: none"> • operators • supervisors or managers • work colleagues with supervisory responsibilities

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • assess staff capability against position descriptions • designate and communicate staff roles and responsibilities, including line management • develop work plans to achieve organisational targets and business objectives • provide training and mentoring for staff • implement strategies to foster teamwork and trust • negotiate with staff as part of dealing with conflict • monitor team and individual work performance and provide feedback to staff
Underpinning	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • enterprise personnel processes

Knowledge and Attitudes	<ul style="list-style-type: none"> • enterprise organisational structure and responsibilities • techniques for building trust and relationships • principles of team work and negotiation • leadership for the work team • performance appraisal systems and procedures • principles of time management • conflict management techniques • enterprise training requirements and processes • relevant legislation, regulations and Codes of Practice with regard to workplace OHS, environmental protection and employment • OHS hazard identification, risk assessment and development of risk controls
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • supervise and instruct staff to achieve work activities • delegate and allocate tasks • assess and evaluate staff capability • identify and provide training requirements • plan timesheets and timetables to meet deadlines • demonstrate safe workplace and environmentally responsible practices • solve problems (staffing, resources) • evaluate performance, provide feedback and prepare reports and performance appraisals • promote and maintain effective relationships between staff • monitor productivity and maintain staff records as required • use literacy skills to read, interpret and follow organisational policies and procedures, develop sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record routine and more complex workplace measures and data • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Analyse and Interpret Production Data
Unit Code	AGR FME4 08 0714
Unit Descriptor	This unit covers the analysis and interpretation of production data and defines the standard required to: collect and organise data; analyse and interpret data; present data with conclusions. This unit applies to farm supervisors who collect and use data from animal production, crop and horticultural production activities.

Elements	Performance Criteria
1. Collect and organise production data	<p>1.1 Information is collected and organised in a format suitable for analysis and interpretation in accordance with enterprise requirements.</p> <p>1.2 Information held by the farm mechanization unit is assessed for accuracy and relevance in line with enterprise requirements.</p> <p>1.3 Methods of collecting data are made reliable and efficient use of farm machinery and equipment resources in accordance with organisational requirements.</p> <p>1.4 Business equipment is used to access, organise and monitor data in accordance with organisational requirements.</p> <p>1.5 Information is updated, modified, maintained and stored in accordance with organisational requirements.</p>
2. Analyse and interpret data	<p>2.1 Objectives of analysis are clearly defined and made consistent with enterprise requirements.</p> <p>2.2 Methods of data analysis are made reliable and suitable to research purposes.</p> <p>2.3 Assumptions used in analyses are cleared, justified and made consistent with enterprise objectives.</p> <p>2.4 Conclusions are supported by evidence and contributed to the achievement of business objectives.</p>
3. Present data	<p>3.1 Data are prepared in an appropriate format, style and structure using suitable business technology.</p> <p>3.2 Structure and format of reports are cleared and conformed to enterprise requirements.</p> <p>3.3 Findings are reported and distributed in accordance with enterprise requirements.</p> <p>3.4 Feedback and comments are obtained on suitability and sufficiency of findings in accordance with enterprise requirements.</p>

Variable	Range
Information	May include: <ul style="list-style-type: none"> • machinery operation data • machinery performance data on field • machinery and equipment maintenance • machinery accidents • machinery history(entry, service years, depreciation and salvage value)
Methods	May include: <ul style="list-style-type: none"> • daily machinery operation field data • staff meeting • management consultation • questionnaire
Data	May include: <ul style="list-style-type: none"> • information based on feedback on results • review of previous data and production figures • peer review • data sampling and statistical analysis

Evidence Guide	
Critical Aspects of Competence	Demonstrate knowledge and skills to: <ul style="list-style-type: none"> • collect and organise data • analyse and interpret data • present data with conclusions
Underpinning of Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • the relevant legislation, industry and enterprise codes of practice and quality assurance procedures that impact on intensive production • knowledge of enterprise record keeping and recording practices • knowledge of enterprise policies and procedures relating to collection, analysis and maintenance of production data • methods to collect and analyse production data • data management systems and methods • business equipment • principles of report writing and data presentation
Underpinning Skills	Demonstrate skills of: <ul style="list-style-type: none"> • collect and organise production data • analyse and interpret data • present data • use literacy skills to read, interpret and follow organisational policies and procedures, develop sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views

	<ul style="list-style-type: none"> • use numeracy skills to estimate, calculate and record routine and more complex workplace measures and data • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Implement Workplace Information System
Unit Code	AGR FME4 09 0714
Unit Descriptor	This unit describes the performance outcomes, skills and knowledge required to implement the workplace information system. It involves the identification, acquisition, initial analysis and use of appropriate information, which plays a significant part in the organisation's effectiveness. Frontline managers play a significant role in contributing to the organisation's effectiveness in identifying, acquiring, analysing and using appropriate information. At this level, work will normally be carried out within routine and non routine methods and procedures, which require planning and evaluation, leadership and guidance of others, and some discretion and judgement.

Elements	Performance Criteria
1. Identify and source information needs	<p>1.1 Information required by teams is determined and located.</p> <p>1.2 Information held by the organisation is acquired and reviewed to determine suitability, accessibility, currency and reliability according to organisational policies</p>
2. Collect, analyse and report information	<p>2.1 Information which is adequate and relevant to the needs of teams is collected in a timely manner.</p> <p>2.2 Information is compiled and ensured in a format suitable for analysis, interpretation and dissemination.</p> <p>2.3 Information is analysed to identify and report relevant trends and developments in terms of the needs for which it was acquired.</p>
3. Implement information systems	<p>3.1 Management information systems are implemented to store, retrieve and regularly review data for decision making purposes.</p> <p>3.2 Technology available in the work area is used to manage information effectively.</p> <p>3.3 Recommendations for improving the information system are submitted to designated persons and/or groups.</p>
4. Prepare for information system changes	<p>4.1 Information about information system future needs, including those who have a specialist role in resource management is collected in consultation with colleagues.</p> <p>4.2 Estimates of information system future needs are ensured to reflect the organisation's business plans, and customer and supplier requirements.</p> <p>4.3 Proposals are supported to secure resources by clearly presenting submissions that describe realistic options, benefits, costs and outcomes.</p> <p>4.4 Team members are prepared to work with new technology and information system changes.</p>

Variable	Range
Information	May include: <ul style="list-style-type: none"> • archived, filed and historical background data • continuous improvement and quality assurance data • data available internally or externally • data shared and retrieved in various forms such as in writing or verbally, electronically or manually • financial and contractual data • marketing and customer-related data • organisational performance data • planning and organisational documents • policies and procedures
Organisational policies	May include: <ul style="list-style-type: none"> • guidelines for decision making throughout the organisation that link the formulation of strategy with its implementation • sets of accepted actions approved by the organisation • Standard Operating Procedures
Technology	May include: <ul style="list-style-type: none"> • computerised systems and software such as databases, project management and word processing • telecommunications devices • any other technology used to carry out work roles and responsibilities
Designated persons and/or groups	May include: <ul style="list-style-type: none"> • groups designated in workplace policies and procedures • managers or supervisors with management roles and responsibilities concerning information systems • other stakeholders accessing the information system such as customers and service providers • other work groups or teams whose work will be affected by the system
Colleagues	May include: <ul style="list-style-type: none"> • employees at the same level or more senior managers • occupational health and safety committee members and other specialists • people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities • team members
Business plans	May include: <ul style="list-style-type: none"> • cash flow projections • long-term budgets/plans • operational plans • short-term budgets/plans • spreadsheet-based financial projections

	<ul style="list-style-type: none"> • targets or key performance indicators for production, productivity, wastage, sales, income and expenditure
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Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • analysis of the information that is required for the effective functioning of the team's work together • knowledge of the range of information systems that are, or should be, available in the workplace • ability to recognise what information system changes and improvements will be required in the future
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • information management systems and technology that would be associated with the workplace such as: <ul style="list-style-type: none"> ➤ budgets and financial management systems ➤ customer information software or records ➤ databases ➤ Personal Digital Assistant (PDA) ➤ product and service information ➤ project management software ➤ record management systems ➤ spreadsheets
Underpinning of Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • literacy skills to work with information, and to research and present information in ways that are appropriate to the work team • technology skills to work with a range of information systems
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Provide Advice and Sell Machinery and Equipment
Unit Code	AGR FME4 10 0714
Unit Descriptor	This unit covers providing advice and sell machinery and defines the standard required to: advise customers as to the most appropriate products for their specific application/environment; engage with and give advice to customers; ensure that the advice, product type, application and suitability are understood by the customer; encourage add on sales; organise the demonstration of products; represent the enterprise in a professional manner when dealing with customers. This unit applies to rural products merchandisers whose job role includes providing advice and selling agricultural farm and small machinery, spare parts and building products.

Elements	Performance Criteria
1. Identify customer needs	<p>1.1 Appropriate interpersonal skills are used to accurately identify customer needs.</p> <p>1.2 Customer enquiries are handled courteously and promptly in accordance with enterprise procedures and industry requirements.</p> <p>1.3 Available products are matched to customer needs.</p> <p>1.4 Knowledge and understanding of machinery and related products are actively and regularly researched and updated from authoritative sources.</p>
2. Provide product advice	<p>2.1 Advice that addresses customer needs is provided in a timely and professional manner.</p> <p>2.2 Products that may meet customer needs are appropriately exhibited to customer.</p> <p>2.3 Customers concerns and questions are addressed sensitively in line with enterprise requirements.</p> <p>2.4 Quotations are prepared and supplied in accordance with enterprise requirements.</p>
3. Sell products	<p>3.1 Sales are completed in accordance with enterprise requirements and to customer's satisfaction.</p> <p>3.2 Opportunities for "add-on" and repeat sales are identified and responded to in line with enterprise procedures.</p> <p>3.3 Sales results are monitored against specified criteria.</p> <p>3.4 Sales techniques are reviewed to enhance future sales results.</p>
4. Handle and maintain products	<p>4.1 Products are handled and stored safely and efficiently in line with manufacturer, enterprise and Occupational Health and Safety (OHS) guidelines.</p> <p>4.2 Documentation is completed in line with enterprise requirements.</p>

	4.3 Stock levels are monitored and re-ordering procedures followed in line with enterprise requirements.
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Variable	Range
Machinery	May include: <ul style="list-style-type: none"> all types of agricultural and small machinery spare parts and building products
Advice	May include: <ul style="list-style-type: none"> that relating to products, usage, application rates

Evidence Guide	
Critical aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> advise customers as to the most appropriate products for their specific application/environment engage with and give advice to customers ensure that the advice, product type, application and suitability are understood by the customer encourage add on sales organise the demonstration of products represent the enterprise in a professional manner when dealing with customers
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> customer service and selling techniques systems and procedures for the safe handling of machinery enterprises business values, structure, products and services industry terminology for products requirements of local or specific customers nature of agricultural activities in district industry trends and improved practices in relation to machinery usage and equipment systems and procedures for the safe handling of machinery and parts manufacturers product recommendations and warranty requirements relevant OHS, industry, fair trading, trade practices, and sales of goods legislation relevant components of Acts relating to machinery and its use
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> assess and demonstrate cost benefits valuing trade-ins research supplier information demonstrate equipment safe lifting, carrying and handling techniques use literacy skills to read, interpret and follow organisational policies and procedures, develop sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of tasks

	<ul style="list-style-type: none"> • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record routine and more complex workplace measures and data • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Maintain Occupational Health and Safety (OHS) Processes
Unit Code	AGR FME4 11 0714
Unit Descriptor	This unit covers maintaining OHS processes and defines the standard required to: facilitate meetings and document actions to consider OHS issues in the workplace; distribute information concerning OHS processes and requirements to staff; establish procedures to document the identification of hazards and assessment of risk covering the operations of the enterprise; provide staff with OHS training in risk assessment, and other areas nominated by risk controls; put emergency procedures in place and organise for safety drills; maintain health and safety records. This unit applies to nominated OHS representatives in a workplace.

Elements	Performance Criteria
1. Provide information about occupational health and safety	<p>1.1 Relevant provisions of OHS legislation and Codes of Practice are accurately and clearly explained to the work group.</p> <p>1.2 Information on enterprise OHS policies, procedures and programs is provided in a readily accessible manner, and is accurately and clearly explained to the work group.</p> <p>1.3 Information about identified hazards and the outcomes of risk assessment and control procedures is regularly provided, and is accurately and clearly explained to the work group.</p>
2. Facilitate the participation of workers in OHS observance and decision-making	<p>2.1 Enterprise procedures for consultation over OHS issues are implemented and monitored to ensure that all members of the work group have the opportunity to contribute.</p> <p>2.2 Procedures whereby workers report OHS hazards, risks are assessed and action is taken to control risks, are clearly described to the work group.</p> <p>2.3 Issues raised are dealt through consultation with and resolved promptly, or referred to the appropriate personnel for resolution in accordance with workplace procedures for issue resolution.</p> <p>2.4 The outcomes of consultation over OHS issues are promptly communicated to the work group.</p>
3. Implement procedures for identifying hazards and assessing and controlling risks	<p>3.1 Existing and potential hazards which are identified are reported so that adequate risk assessment and effective control measures are implemented.</p> <p>3.2 Work procedures to control OHS risks are implemented by the work group and regular monitoring occurs to ensure ongoing adherence and effectiveness of risk control.</p> <p>3.3 Inadequacies in existing risk control measures are identified in accordance with the hierarchy of control, and reported to designated personnel/management.</p>

	<p>3.4 Inadequacies in allocation of resources are identified to ensure safe work practice and reported to management.</p> <p>3.5 Existing risk control measures are monitored and results reported regularly in accordance with workplace procedures.</p>
4. Implement workplace procedures for dealing with emergencies and hazardous events	<p>4.1 Workplace procedures for dealing with OHS emergencies are implemented where necessary to ensure that prompt and effective control action is taken.</p> <p>4.2 OHS emergencies are reported in accordance with established enterprise procedures.</p> <p>4.3 Control measures are implemented to prevent recurrence and minimise risk of emergencies and hazardous events based on the hierarchy of control, or alternatively, referred to designated personnel for implementation.</p>
5. Implement and monitor enterprise procedures for providing OHS training	<p>5.1 OHS induction and training needs are identified accurately by specifying the gaps between OHS competencies required and those held by the work group.</p> <p>5.2 Arrangements are made for meeting identified OHS training needs in both on and off-the-job training programs in consultation with relevant parties.</p>
6. Implement and monitor enterprise procedures for maintaining occupational health and safety records	<p>6.1 OHS records for work area are accurately and legibly completed in accordance with workplace requirements for OHS records, and legal requirements for the maintenance of records of occupational hazards, risk control, injury and disease events.</p> <p>6.2 Aggregate information from OHS records is used to identify hazards and monitor risk control procedures within work area according to enterprise procedures and within scope of responsibilities.</p>

Variable	Range
OHS processes	<p>May include:</p> <ul style="list-style-type: none"> all OHS processes identified in OHS legislation and regulations and industry Codes of Practice

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> facilitate meetings and document actions to consider OHS issues in the workplace distribute information concerning OHS processes and requirements to staff establish procedures to document the identification of hazards and assessment of risk covering the operations of the enterprise provide staff with OHS training in risk assessment, and other areas nominated by risk controls put emergency procedures in place and organise for safety drills

	<ul style="list-style-type: none"> • maintain health and safety records
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • hazards in the workplace • relevant OHS legislation and Codes of Practice • risk control measures • the hierarchy of OHS risk control and its implementation for hazards in land-based industries • communication and engagement strategies with workers • suitable communication techniques • relevant enterprise management systems and procedures • accident/incident investigation • participative work practices
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • facilitate the participation of workers in OHS observance and decision-making • identify OHS hazards and conduct the risk assessment process • respond to emergencies and OHS issues in an appropriate and timely manner • use literacy skills to read, interpret and follow organisational policies and procedures, develop sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of tasks • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record routine and more complex workplace measures and data • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Plan and Organize Work
Unit Code	AGR FME4 12 0714
Unit Descriptor	This unit covers the knowledge, skills and attitude required in planning and organizing work activities in a production application. It may be applied to a small independent operation or to a section of a large organization.

Elements	Performance Criteria
1. Set objectives	<p>1.1 Objectives are planned consistent with and linked to work activities in accordance with organizational aims.</p> <p>1.2 Objectives are stated as measurable targets with clear time frames.</p> <p>1.3 Support and commitment of team members are reflected in the objectives.</p> <p>1.4 Realistic and attainable objectives are identified.</p>
2. Plan and schedule work activities	<p>2.1 Tasks/work activities to be completed are identified and prioritized as directed.</p> <p>2.2 Tasks/work activities are broken down into steps in accordance with set time frames and achievable components.</p> <p>2.3 Task/work activities are assigned to appropriate team or individuals in accordance with agreed functions.</p> <p>2.4 Resources are allocated as per requirements of the activity.</p> <p>2.5 Schedule of work activities is coordinated with personnel concerned.</p>
3. Implement work plans	<p>3.1 Work methods and practices are identified in consultation with personnel concerned.</p> <p>3.2 Work plans are implemented in accordance with set time frames, resources and standards.</p>
4. Monitor work activities	<p>4.1 Work activities are monitored and compared with set objectives.</p> <p>4.2 Work performance is monitored.</p> <p>4.3 Deviations from work activities are reported and recommendations are coordinated with appropriate personnel and in accordance with set standards.</p> <p>4.4 Reporting requirements are complied with in accordance with recommended format.</p> <p>4.5 Timeliness of report is observed.</p> <p>Files are established and maintained in accordance with standard operating procedures.</p>

<p>5. Review and evaluate work plans and activities</p>	<p>5.1 Work plans, strategies and implementation are reviewed based on accurate, relevant and current information.</p> <p>5.2 Review is done based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback.</p> <p>5.3 Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities.</p> <p>5.4 Performance appraisal is conducted in accordance with organization rules and regulations.</p> <p>5.5 Performance appraisal report is prepared and documented regularly as per organization requirements.</p> <p>5.6 Recommendations are prepared and presented to appropriate personnel/authorities.</p> <p>5.7 Feedback mechanisms are implemented in line with organization policies. Work plans, strategies and implementation are reviewed based on accurate, relevant and current information.</p> <p>5.8 Review is done based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback.</p> <p>5.9 Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities.</p> <p>5.10 Performance appraisal is conducted in accordance with organization rules and regulations.</p> <p>5.11 Performance appraisal report is prepared and documented regularly as per organization requirements.</p> <p>5.12 Recommendations are prepared and presented to appropriate personnel/authorities.</p> <p>5.13 Feedback mechanisms are implemented in line with organization policies.</p>
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Variable	Range
Objectives	May include but not limited to: <ul style="list-style-type: none"> • Specific • General
Resources	May include but not limited to: <ul style="list-style-type: none"> • Personnel • Equipment and technology • Services • Supplies and materials • Sources for accessing specialist advice • Budget
Schedules of work activities	May include but not limited to: <ul style="list-style-type: none"> • Daily

	<ul style="list-style-type: none"> • Work-based • Contractual • Regular
Work methods and practices	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Legislated regulations and codes of practice • Industry regulations and codes of practice • Occupational health and safety practices
Work plans	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Daily work plans • Project plans • Program plans • Resource plans • Skills development plans • Management strategies and objectives
Standards	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Performance targets • Performance management and evaluation systems • Occupational standards • Employment contracts • Client contracts • Discipline procedures • Workplace assessment guidelines • Internal quality assurance • Internal and external accountability and auditing requirements • Training Regulation Standards • Safety Standards
Appropriate personnel/ authorities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Appropriate personnel include: <ul style="list-style-type: none"> ➢ Management ➢ Line Staff
Feedback mechanisms	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Verbal feedback • Informal feedback • Formal feedback • Questionnaire • Survey and group discussion

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • set objectives • plan and schedule work activities • implement work plans • monitor work activities • review and evaluate work plans and activities
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities • organizations policies, strategic plans, guidelines related to the role of the work unit

	<ul style="list-style-type: none"> • team work and consultation strategies
Underpinning Skills	<p>Demonstrates skill to:</p> <ul style="list-style-type: none"> • plan • lead • organize • coordinate • communicate • inter-and intra-person/motivation skills present
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Migrate to New Technology
Unit Code	AGR FME4 13 0714
Unit Descriptor	This unit defines the competence required to apply skills and knowledge in using new or upgraded technology. The rationale behind this unit emphasizes the importance of constantly reviewing work processes, skills and techniques in order to ensure that the quality of the entire business process is maintained at the highest level possible through the appropriate application of new technology. To this end, the person is typically engaged in on-going review and research in order to discover and apply new technology or techniques to improve aspects of the organization's activities.

Elements	Performance Criteria
1. Apply existing knowledge and techniques to technology and transfer	<p>1.1 Situations are identified where existing knowledge can be used as the basis for developing new skills.</p> <p>1.2 New or upgraded technology skills are acquired and used to enhance learning.</p> <p>1.3 New or upgraded equipment are identified, classified and used where appropriate, for the benefit of the organization.</p>
2. Apply functions of technology to assist in solving organizational problems	<p>2.1 Testing of new or upgraded equipment is conducted according to the specification manual.</p> <p>2.2 Features of new or upgraded equipment are applied within the organization</p> <p>2.3 Features and functions of new or upgraded equipment are used for solving organizational problems</p> <p>2.4 Sources of information relating to new or upgraded equipment are accessed and used</p>
3. Evaluate new or upgraded technology performance	<p>3.1 New or upgraded equipment is evaluated for performance, usability and against OHS standards.</p> <p>3.2 Environmental considerations are determined from new or upgraded equipment.</p> <p>3.3 Feedback is sought from users where appropriate.</p>

Variables	Range
Environmental Considerations	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> recycling, safe disposal of packaging (e.g. cardboard, polystyrene, paper, plastic) and correct disposal of waste materials by an authorized body
Feedback	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> surveys, questionnaires, interviews and meetings

Evidence Guide	
Critical Aspects of Competence	Competence must confirm the ability to transfer the application of existing skills and knowledge to new technology
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • Broad awareness of current technology trends and directions in the industry (e.g. systems/procedures, services, new developments, new protocols) • Knowledge of vendor product directions • Ability to locate appropriate sources of information regarding metal manufacturing and new technologies • Current industry products/services, procedures and techniques with knowledge of general features • Information gathering techniques
Underpinning Skills	Demonstrate skills of: <ul style="list-style-type: none"> • Research skills for identifying broad features of new technologies • Ability to assist in the decision making process • Literacy skills in regard to interpretation of technical manuals • Ability to solve known problems in a variety of situations and locations • Evaluate and apply new technology to assist in solving organizational problems • General analytical skills in relation to known problems
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Establish Quality Standards
Unit Code	AGR FME4 14 0714
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to establish quality specifications for work outcomes and work performance. It includes monitoring and participation in maintaining and improving quality, identifying critical control points in the production of quality output and assisting in planning and implementing of quality assurance procedures.

Elements	Performance Criteria
1. Establish quality specifications for product	1.1 Market specifications are sourced and legislated requirements identified. 1.2 Quality specifications are developed and agreed. 1.3 Quality specifications are documented and introduced to organization staff / personnel in accordance with the organization policy. 1.4 Quality specifications are updated when necessary.
2. Identify hazards and critical control points	2.1 Critical control points impacting on quality are identified. 2.2 Degree of risk for each hazard is determined. 2.3 Necessary documentation is accomplished in accordance with organization quality procedures.
3. Assist in planning of quality assurance procedures	3.1 Procedures for each identified control point are developed to ensure optimum quality. 3.2 Hazards and risks are minimized through application of appropriate controls. 3.3 Processes are developed to monitor the effectiveness of quality assurance procedures.
4. Implement quality assurance procedures	4.1 Responsibilities are allocated for carrying out procedures to staff and contractors. 4.2 Instructions are prepared in accordance with the enterprise's quality assurance program. 4.3 Staff and contractors are given induction training on the quality assurance policy. 4.4 Staff and contractors are given in-service training relevant to their allocated safety procedures .
5. Monitor quality of work outcome	5.1 Quality requirements are identified. 5.2 Inputs are inspected to confirm capability to meet quality requirements. 5.3 Work is conducted to produce required outcomes. 5.4 Work processes are monitored to confirm quality of output and/or service.

	5.5 Processes are adjusted to maintain outputs within specification.
6. Participate in maintaining and improving quality at work	<p>6.1 Work area, materials, processes and product are routinely monitored to ensure compliance with quality requirements.</p> <p>6.2 Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements.</p> <p>6.3 Corrective action is taken within level of responsibility to maintain quality standards.</p> <p>6.4 Quality issues are raised with designated personnel.</p>
7. Report problems that affect quality	<p>7.1 Potential or existing quality problems are recognized.</p> <p>7.2 Instances of variation in quality are identified from specifications or work instructions.</p> <p>7.3 Variation and potential problems are reported to supervisor/manager according to enterprise guidelines.</p>

Variable	Range
Sourced	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • End-users • Customers or stakeholders
Legislated requirements	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Verification of product quality as part of consumer legislation or specific legislation related to product content or composition.
Safety procedures	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Use of tools and equipment for fabrication/production/manufacturing works • Workplace environment and handling of material safety, • Following occupational health and safety procedures designated for the task • Respect the policies, regulations, legislations, rule and procedures for manufacturing/production/fabrication works

Evidence Guide	
Critical Aspect of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • Monitor quality of work • Establish quality specifications for product • Participate in maintaining and improving quality at work • Identify hazards and critical control points in the production of quality product • Assist in planning of quality assurance procedures • Report problems that affect quality • Implement quality assurance procedures
Underpinning Knowledge	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • work and product quality specifications • quality policies and procedures • improving quality at work • hazards and critical points of operation

	<ul style="list-style-type: none"> • obtaining and using information • applying federal and regional legislation within day-today work activities • accessing and using management systems to keep and maintain accurate records • requirements for correct preparation and operation • technical writing
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • monitor quality of work • establish quality specifications for product • participate in maintaining and improving quality at work • identify hazards and critical control points in the production of quality product • assist in planning of quality assurance procedures • report problems that affect quality • implement quality assurance procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Develop Individuals and Team
Unit Code	AGR FME4 15 0714
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to determine individual and team development needs and facilitate the development of the workgroup.

Elements	Performance Criteria
1. Provide team leadership	<p>1.1 Learning and development needs are systematically identified and implemented in line with organizational requirements.</p> <p>1.2 Learning plan is collaboratively developed and implemented to meet individual and group training and developmental needs.</p> <p>1.3 Individuals are encouraged to self-evaluate performance and identify areas for improvement.</p> <p>1.4 Feedback on performance of team members is collected from relevant sources and compared with established team learning process.</p>
2. Foster individual and organizational growth	<p>2.1 Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of Competence standards.</p> <p>2.2 Learning delivery methods are made appropriate to the learning goals, the learning style of participants and availability of equipment and resources.</p> <p>2.3 Workplace learning opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies.</p> <p>2.4 Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.</p>
3. Monitor and evaluate workplace learning	<p>3.1 Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements.</p> <p>3.2 Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support.</p> <p>3.3 Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning.</p> <p>3.4 Records and reports of competence are maintained within organizational requirement.</p>
4. Develop team commitment and cooperation	<p>4.1 Open communication processes to obtain and share information is used by team.</p> <p>4.2 Decisions are reached by the team in accordance with its agreed roles and responsibilities.</p> <p>4.3 Mutual concern and camaraderie are developed in the team.</p>

5. Facilitate accomplishment of organizational goals	<p>5.1 Team members are made actively participatory in team activities and communication processes.</p> <p>5.2 Individual and joint responsibility is developed by teams members for their actions.</p> <p>5.3 Collaborative efforts are sustained to attain organizational goals.</p>
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Variable	Range
Learning and development needs	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Coaching, monitoring and/or supervision • Formal/informal learning program • Internal/external training provision • Work experience/exchange/opportunities • Personal study • Career planning/development • Performance evaluation • Workplace skills assessment • Recognition of prior learning
Organizational requirements	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Quality assurance and/or procedures manuals • Goals, objectives, plans, systems and processes • Legal and organizational policy/guidelines and requirements • Safety policies, procedures and programs • Confidentiality and security requirements • Business and performance plans • Ethical standards • Quality and continuous improvement processes and standards
Feedback on performance	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Formal/informal performance evaluation • Obtaining feedback from supervisors and colleagues • Obtaining feedback from clients • Personal and reflective behaviour strategies • Routine and organizational methods for monitoring service delivery
Learning delivery methods	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • On the job coaching or monitoring • Problem solving • Presentation/demonstration • Formal course participation • Work experience and involvement in professional networks • Conference and seminar attendance

Evidence Guide			
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • identify and implement learning opportunities for others • give and receive feedback constructively • facilitate participation of individuals in the work of the team • negotiate plans to improve the effectiveness of learning • prepare learning plans to match skill needs 		
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	<ul style="list-style-type: none"> • access and designate learning opportunities
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • coaching and monitoring principles • understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective • understanding how to facilitate team development and improvement • understanding methods and techniques to obtain and interpreting feedback • understanding methods for identifying and prioritizing personal development opportunities and options • knowledge of career paths and competence standards in the industry
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • read and understand a variety of texts, preparing general information and documents according to target audience; spell with accuracy; use grammar and punctuation effective relationships and conflict management • communicate including receiving feedback and reporting, maintaining effective relationships and conflict management • plan and organize required resources and equipment to meet learning needs • coach and mentor skills to provide support to colleagues • report to organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes • facilitate and conduct small group training sessions • relate to people from a range of social, cultural, physical and mental backgrounds
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Utilize Specialized Communication Skills
Unit Code	AGR FME4 16 0714
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to use specialized communication skills to meet specific needs of internal and external clients, conduct interviews, facilitate group discussions, and contribute to the development of communication strategies.

Elements	Performance Criteria
1. Meet common and specific communication needs of clients and colleagues	<p>1.1 Specific communication needs of clients and colleagues are identified and met.</p> <p>1.2 Different approaches are used to meet communication needs of clients and colleagues.</p> <p>1.3 Conflict is addressed promptly and in a timely way and in a manner which does not compromise the standing of the organization.</p>
2. Contribute to the development of communication strategies	<p>2.1 Strategies for internal and external dissemination of information are developed, promoted, implemented and reviewed as required.</p> <p>2.2 Channels of communication are established and reviewed regularly.</p> <p>2.3 Coaching in effective communication is provided.</p> <p>2.4 Work related network and relationship are maintained as necessary.</p> <p>2.5 Negotiation and conflict resolution strategies are used where required.</p> <p>2.6 Communication with clients and colleagues is made appropriate to individual needs and organizational objectives.</p>
3. Represent the organization	<p>3.1 When participating in internal or external fora, presentation is made relevant, appropriately researched and presented in a manner to promote the organization.</p> <p>3.2 Presentation is made clear and sequential and delivered within a predetermined time.</p> <p>3.3 Appropriate media is utilized to enhance presentation.</p> <p>3.4 Differences in views are respected.</p> <p>3.5 Written communication is made consistent with organizational standards.</p> <p>3.6 Inquiries are responded in a manner consistent with organizational standard.</p>
4. Facilitate group discussion	<p>4.1 Mechanisms which enhance effective group interaction are defined and implemented.</p>

	<p>4.2 Strategies which encourage all group members to participate are used routinely.</p> <p>4.3 Objectives and agenda are routinely set and followed for meetings and discussions.</p> <p>4.4 Relevant information is provided to group to facilitate outcomes.</p> <p>4.5 Evaluation of group communication strategies is undertaken to promote participation of all parties.</p> <p>4.6 Specific communication needs of individuals are identified and addressed.</p>
5. Conduct interview	<p>5.1 A range of appropriate communication strategies are employed in interview situations.</p> <p>5.2 Different types of interview are conducted in accordance with the organizational procedures.</p> <p>5.3 Records of interviews are made and maintained in accordance with organizational procedures.</p> <p>5.4 Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated.</p>

Variable	Range
Strategies	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Recognizing own limitations • Utilizing techniques and aids • Providing written drafts • Verbal and non verbal communication
Effective group interaction	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Identifying and evaluating what is occurring within an interaction in a non-judgmental way • Using active listening • Making decision about appropriate words, behaviour • Putting together response which is culturally appropriate • Expressing an individual perspective • Expressing own philosophy, ideology and background and exploring impact with relevance to communication
Interview situations	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Establish rapport • obtain facts and information • Facilitate resolution of issues • Develop action plans • Diffuse potentially difficult situation
Types of Interview	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • Related to staff issues • Routine • Confidential • Evidential • Non-disclosure and Disclosure

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • effective communication skills with clients and work colleagues accessing service • Adopted relevant communication techniques and strategies to meet client particular needs and difficulties
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • communication process • dynamics of groups and different styles of group leadership • communication skills relevant to client groups
Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • full range of communication techniques including: <ul style="list-style-type: none"> ➢ active listening ➢ feedback ➢ interpretation ➢ role boundaries setting ➢ negotiation ➢ establishing empathy ➢ communication strategies • communicate to fulfil job roles as specified by the organization
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Manage and Maintain Small/Medium Business Operations
Unit Code	AGR FME4 17 0714
Unit Descriptor	This unit covers the operation of day-to-day business activities in a micro or small business. The strategies involve developing, monitoring and managing work activities and financial information, developing effective work habits, and adjusting work schedules as needed.

Elements	Performance Criteria
1. Identify daily work requirements	<p>1.1 Work requirements are identified for a given time period by taking into consideration resources and constraints.</p> <p>1.2 Work activities are prioritized based on business needs, requirements and deadlines.</p> <p>1.3 If appropriate, work is allocated to relevant staff or contractors to optimize efficiency.</p>
2. Monitor and manage work	<p>2.1 People, resources and/or equipment are coordinated to provide optimum results.</p> <p>2.2 Staff, clients and/or contractors are communicated within a clear and regular manner, to monitor work in relation to business goals or timelines.</p> <p>2.3 Problem solving techniques are applied to work situations to overcome difficulties and achieve positive outcomes.</p>
3. Develop effective work habits	<p>3.1 Work and personal priorities are identified and a balance is achieved between competing priorities using appropriate time management strategies.</p> <p>3.2 Input from internal and external sources is sought and used to develop and refine new ideas and approaches.</p> <p>3.3 Business or inquiries is/are responded to promptly and effectively.</p> <p>3.4 Information is presented in a format appropriate to the industry and audience.</p>
4. Interpret financial information	<p>4.1 Relevant documents and reports are identified.</p> <p>4.2 Documents and reports are read and understood and any implications discussed with appropriate persons.</p> <p>4.3 Data and numerical calculations are analyzed, checked, evaluated, organized and reconciled.</p> <p>4.4 Daily financial records and cash flow are maintained correctly and in accordance with legal and accounting requirements.</p> <p>4.5 Invoices and payments are prepared and distributed in a timely manner and in accordance with legal requirements.</p> <p>4.6 Outstanding accounts are collected or followed-up on</p>

5. Evaluate work performance	<p>5.1 Opportunities for improvements are monitored according to business demands.</p> <p>5.2 Work schedules are adjusted to incorporate necessary modifications to existing work and routines or changing needs and requirements.</p> <p>5.3 Proposed changes are clearly communicated and recorded to aid in future planning and evaluation.</p> <p>5.4 Relevant codes of practice are used to guide an ethical approach to workplace practices and decisions.</p>
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Variable	Range
Resources	May include but is not limited to: <ul style="list-style-type: none"> • staff • money • time • equipment • space
Business goals	May include but is not limited to: <ul style="list-style-type: none"> • sales targets • budgetary targets • team and individual goals • production targets • reporting deadlines
Problem solving techniques	May include but is not limited to: <ul style="list-style-type: none"> • gaining additional research and information to make better informed decisions • looking for patterns • considering related problems or those from the past and how they were handled • eliminating possibilities • identifying and attempting sub-tasks • collaborating and asking for advice or help from additional sources
Time management strategies	May include but is not limited to: <ul style="list-style-type: none"> • prioritizing and anticipating • short term and long term planning and scheduling • creating a positive and organized work environment • clear timelines and goal setting that is regularly reviewed and adjusted as necessary • breaking large tasks into smaller tasks • getting additional support if identified and necessary
Internal and external sources	May include but is not limited to: <ul style="list-style-type: none"> • staff and colleagues • management, supervisors, advisors or head office • relevant professionals such as lawyers, accountants, management consultants • professional associations

Evidence Guide	
Critical Aspects of Competence	<p>A person must be able to demonstrate:</p> <ul style="list-style-type: none"> • ability to identify daily work requirements and allocate work appropriately • ability to interpret financial documents in accordance with legal requirements
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Federal and Local Government legislative requirements affecting business operations, especially in regard to Occupational Health and Safety (OHS), equal employment opportunity, industrial relations and anti-discrimination • technical or specialist skills relevant to the business operation • relevant industry code of practice • planning techniques to establish realistic timelines and priorities • identification of relevant performance measures • quality assurance principles and methods • relevant marketing, management, sales and financial concepts • methods for monitoring performance and implementing improvements • structured approaches to problem solving, idea management and time management
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • interpret legal requirements, company policies and procedures and immediate, day-to-day demands • communicate using questioning, clarifying, reporting, and giving and receiving constructive feedback • numeracy skills for performance information, setting targets and interpreting financial documents and reports • technical and analytical skills to interpret business document, reports and financial statements and projections • relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities • solve problem and develop contingency plans • using computers and software packages to record and manage data and to produce reports • evaluate using assessment work and outcomes • observe for identifying appropriate people, resources and to monitor work
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level IV	
Unit Title	Apply Problem Solving Techniques and Tools
Unit Code	AGR FME4 18 0714
Unit Descriptor	This unit of competency covers the knowledge, skills and attitude required to apply scientific problem solving techniques and tools to enhance quality, productivity and other kaizen elements on continual basis.

Elements	Performance criteria
1. Identify and select theme/problem.	<p>1.1 Safety requirements are followed in accordance with safety plans and procedures.</p> <p>1.2 All possible problems related to the process /Kaizen elements are listed using statistical tools and techniques.</p> <p>1.3 All possible problems related to kaizen elements are identified and listed on Visual Management Board/Kaizen Board.</p> <p>1.4 Problems are classified based on obviousness of cause and action.</p> <p>1.5 Critical factors like the number of customers affected, Potentials for bottlenecks, and number of complaints etc... is selected.</p> <p>1.6 Problems related to priorities of Kaizen Elements are given due emphasis and selected.</p>
2. Grasp current status and set goal.	<p>2.1 The extent of the problem is defined.</p> <p>2.2 Appropriate and achievable goal is set.</p>
3. Establish activity plan.	<p>3.1 The problem is confirmed.</p> <p>3.2 High priority problem is selected.</p> <p>3.3 The extent of the problem is defined.</p> <p>3.4 Activity plan is established as per 5W1H.</p>
4. Analyze causes of a problem.	<p>4.1 All possible causes of a problem are listed.</p> <p>4.2 Cause relationships are analyzed using 4M1E.</p> <p>4.3 Causes of the problems are identified.</p> <p>4.4 Root causes are selected.</p> <p>4.5 The root cause which is most directly related to the problem is selected.</p> <p>4.6 All possible ways are listed using creative idea generation to eliminate the most critical root cause.</p> <p>4.7 The suggested solutions are carefully tested and evaluated for potential complications.</p> <p>4.8 Detailed summaries of the action plan are prepared to implement the suggested solution.</p>

5. Examine countermeasures and their implementation.	<p>5.1 Action plan is implemented by medium KPT members.</p> <p>5.2 Implementation is monitored according to the agreed procedure and activities are checked with preset plan.</p>
6. Assess effectiveness of the solution.	<p>6.1 Tangible and intangible results are identified.</p> <p>6.2 The results are verified over time.</p> <p>6.3 Tangible results are compared with targets using various types of diagram.</p>
7. Standardize and sustain operation.	<p>7.1 If the goal is achieved, the new procedures are standardized and made part of daily activities.</p> <p>7.2 All employees are trained on the new Standard Operating Procedures (SOPs).</p> <p>7.3 SOP is verified and followed by all employees.</p> <p>7.4 The next problem is selected to be tackled by the team.</p>

Variables	Range
Safety requirements	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • OHS requirements include legislation, material safety, managements system, hazardous substances and dangerous goods code and local safe operating procedures • Work is carried out in accordance with legislative obligations, environmental legislations, relevant health regulation, manual handling procedure and organization insurance requirements
Statistical tools and techniques	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • 7 QC tools may include: <ul style="list-style-type: none"> ➢ Stratification ➢ Pareto Diagram ➢ Cause and Effect Diagram ➢ Check Sheet ➢ Control Chart/Graph ➢ Histogram ➢ Scatter Diagram • QC techniques may include: <ul style="list-style-type: none"> ➢ Brain storming ➢ Why analysis ➢ What if analysis ➢ 5W1H
Kaizen Elements	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • Quality • Cost • Productivity • Delivery • Safety • Moral • Environment • Gender equality

5W1H	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • Who: person in charge • Why: objective • What: item to be implemented • Where: location • When: time frame • How: method
4M1E	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • Man • Machine • Method • Material and • Environment
Creative idea generation	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • Brainstorming • Exploring and examining ideas in varied ways • Elaborating and extrapolating • Conceptualizing
Medium KPT	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • 5S • 4M (machine, method, material and man) • 4P (Policy, procedures, People and Plant) • PDCA cycle • Basics of IE tools and techniques
Tangible and intangible results	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • Tangible result may include: <ul style="list-style-type: none"> ➢ Quantifiable data • Intangible result may include: <ul style="list-style-type: none"> ➢ Qualitative data
Various types of diagram	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • Line graph • Bar graph • Pie-chart • Scatter diagram • Affinity diagram
Standard Operating Procedures (SOPs)	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • The customer demand • The most efficient work routine (steps) • The cycle times required to complete work elements • All process quality checks required to minimize defects/errors • The exact amount of work in process required

Evidence Guide

Critical Aspects of Assessment	<p>Demonstrates skills and knowledge competencies to:</p> <ul style="list-style-type: none"> • Apply all relevant procedures and regulatory requirements to ensure quality and productivity of an organization. • Detect non-conforming products/services in the work area • Apply effective problem solving approaches/strategies. • Implement and monitor improved practices and
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	<p>procedures</p> <ul style="list-style-type: none"> • Apply statistical quality control tools and techniques.
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • QC story/PDCA cycle/ • QC story/ Problem solving steps • QCC techniques • 7 QC tools • Basic IE tools and techniques. • SOP • Quality requirements associated with the individual's job function and/or work area • Workplace procedures associated with the candidate's regular technical duties • Relevant health, safety and environment requirements • organizational structure of the enterprise • Lines of communication • Methods of making/recommending improvements. • Reporting procedures
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Apply problem solving techniques and tools • Apply statistical analysis tools • Apply Visual Management Board/Kaizen Board. • Detect non-conforming products or services in the work area • Document and report information about quality, productivity and other kaizen elements. • Contribute effectively within a team to recognize and recommend improvements in quality, productivity and other kaizen elements. • Implement and monitor improved practices and procedures. • Organize and prioritize activities and items. • Read and interpret documents describing procedures • Record activities and results against templates and other prescribed formats.
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

NTQF Level V

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Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Manage Occupational Health and Safety (OHS) Processes
Unit Code	AGR FME5 01 0714
Unit Descriptor	This unit covers managing OHS processes and defines the standard required to: develop OHS policies and procedures which demonstrate enterprise commitment to OHS; establish arrangements to ensure the involvement of all employees in the management of OHS; supervise procedures for identifying hazards; conduct risk assessments to cover all phases of the organisations operations involving all relevant staff; develop risk controls and ensure all relevant staff are aware of them; establish and maintain procedures for dealing with hazardous events and emergencies; established and maintain an OHS safety induction and training program; establish and maintain a system for OHS records; review the enterprise OHS system based on an analysis of OHS records, related policies, procedures and programs and make changes in response to review. This unit requires the ability to develop management systems and procedures, and to manage the implementation process. The process is usually conducted within policy guidelines and procedures where discretion and judgement are required.

Elements	Performance Criteria
1. Develop OHS policies and procedures	<p>1.1 An OHS business plan and program are developed for the enterprise in consultation with designated personnel and/or management.</p> <p>1.2 OHS responsibilities and duties are clearly defined, allocated and included in job descriptions and duty statements for all relevant positions.</p> <p>1.3 Financial and human resources are identified, sought and/or provided for implementation of OHS policies and procedures as required.</p> <p>1.4 Information on the OHS system and procedures are provided and explained for the area of responsibility in a form which is readily understood by employees.</p>
2. Establish and maintain processes to ensure the participation of all employees in the application of OHS	<p>2.1 Consultation processes are established and maintained with employees and their representatives in accordance with relevant legislation and according to enterprise guidelines.</p> <p>2.2 Issues are raised through participation and consultation is dealt with and resolved promptly and effectively in accordance with enterprise procedures for issue resolution.</p> <p>2.3 Information about the outcomes of participation and consultation is provided in a manner readily accessible to employees.</p>
3. Establish and maintain	3.1 Existing and potential hazards within the area of responsibility are identified and confirmed in accordance

<p>procedures for identifying hazards</p>	<p>with legislation, Codes of Practice, and trends identified from the OHS records system.</p> <p>3.2 A procedure hazards are developed for ongoing identification of and integrated within systems of work and procedures.</p> <p>3.3 Activities are appropriately monitored to ensure that this procedure is adopted effectively throughout areas of managerial responsibility.</p> <p>3.4 Hazard identification is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created.</p>
<p>4. Establish and maintain procedures for assessing risks</p>	<p>4.1 Risks associated with identified hazards are assessed in accordance with safe work practices, with information derived from workplace OHS records and industry wide information, and with relevant OHS legislation and Codes of Practice.</p> <p>4.2 A procedure for ongoing assessment of risks is developed and integrated within systems of work and procedures.</p> <p>4.3 Activities are monitored to ensure that risk assessment procedures are adopted effectively throughout the area of managerial responsibility.</p> <p>4.4 Risk assessment is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that the risk from hazards is not increased.</p> <p>4.5 Accident and dangerous occurrences are investigated and recorded according to enterprise and OHS procedures.</p>
<p>5. Interim risk control measures are implemented until a better or permanent control measure is developed</p>	<p>5.1 Measures to control assessed risks are developed and implemented in accordance with the hierarchy of control, relevant OHS legislation, Codes of Practice, and trends identified from the OHS records system.</p> <p>5.2 When measures which control a risk at its source are not immediately practicable, interim solutions are implemented until a permanent control measure is developed.</p> <p>5.3 A process of ongoing hazard identification and risk assessment, and review of effectiveness of control programs is developed and integrated into enterprise management arrangements.</p> <p>5.4 Activities are monitored to ensure that the risk control procedure is adopted effectively throughout the area of managerial responsibility.</p> <p>5.5 Risk control is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that adequate risk control measures are included.</p> <p>5.6 Systems are designed to reduce risk and administrative arrangements to ensure safe OHS work practices are put in place where elimination of a hazard is not possible.</p>

	<p>5.7 Effective OHS risk management measures are set in place during any modification of the buildings and structures, machinery and work activities.</p> <p>5.8 Inadequacies in existing risk control measures are identified and resources enabling implementation of new measures sought and/or provided according to appropriate workplace procedures.</p>
6. Plan and manage enterprise procedures for dealing with hazardous events	<p>6.1 Potential emergencies posing risk to health and safety of workers and the public are correctly identified.</p> <p>6.2 Plans and procedures which control the risks associated with hazardous events and meet any legislative requirements as a minimum are developed in consultation with appropriate emergency services.</p> <p>6.3 Appropriate information and training are provided to employees to enable implementation of correct emergency procedures.</p> <p>6.4 Adequate numbers of workers are trained in First Aid to ensure that first aid is applied to preserve life and minimise injury.</p>
7. Establish and maintain an OHS safety induction and training program	<p>7.1 An OHS induction program is developed to meet the occupational health and safety needs of new employees.</p> <p>7.2 An OHS training program is developed as part of supervisors and employee's general training.</p>
8. Establish and maintain a system for OHS records	<p>8.1 A system for keeping OHS records is established and monitored to allow identification of patterns of occupational injury and disease in the enterprise.</p> <p>8.2 Records are regularly updated and used to evaluate the effectiveness of the enterprise OHS program.</p>
9. Evaluate the enterprise OHS system and related policies, procedures and programs	<p>9.1 The effectiveness of the OHS system and related policies, procedures and programs is assessed according to enterprise aims with respect to OHS.</p> <p>9.2 Improvements to the OHS system are developed and implemented to ensure more effective achievement of enterprise aims.</p> <p>9.3 Compliance with OHS legislation and Codes of Practice is assessed to ensure that legal OHS standards are maintained as a minimum.</p>

Variable	Range
The enterprise OHS program	<ul style="list-style-type: none"> The full range of hazards that workers are exposed to (or are likely to be exposed to) in the workplace.

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> develop OHS policies and procedures which demonstrate enterprise commitment to OHS

	<ul style="list-style-type: none"> • establish arrangements to ensure the involvement of all employees in the management of OHS • supervise procedures for identifying hazards • conduct risk assessments to cover all phases of the organisations operations involving all relevant staff • develop risk controls and ensure all relevant staff are aware of them • establish and maintain procedures for dealing with hazardous events and emergencies • established and maintain an OHS safety induction and training program • establish and maintain a system for OHS records including records to be kept and persons responsible • review the enterprise OHS system based on an analysis of OHS records, related policies, procedures and programs and make changes in response to review 		
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • data and documentation for industry injury statistics • significant hazards and areas of risk in the workplace • all relevant OHS legislation and Codes of Practice consistent with the hierarchy of OHS risk control and its implementation for hazards in land-based industries • risk control measures • hierarchy of risk controls • relevant management systems and procedures • public safety issues 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • develop OHS policies and procedures which demonstrate enterprise commitment to OHS • establish and maintain arrangements to ensure the involvement of all employees in the management of OHS • establish and maintain procedures for identifying hazards • establish and maintain procedures for assessing risks • establish and maintain procedures for controlling risks • establish and maintain enterprise procedures for dealing with hazardous events • establish and maintain an OHS safety induction and training program • establish and maintain a system for OHS records • evaluate the enterprise OHS system and related policies, procedures and programs • analyse recorded data to determine where the OHS program can better meet enterprise and employee needs • Use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views 		
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	<ul style="list-style-type: none"> • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Manage Machinery and Equipment
Unit Code	AGR FME5 02 0714
Unit Descriptor	This unit covers managing machinery and equipment and defines the standard required to: develop machinery and equipment operation and maintenance procedures in compliance with environmental Codes of Practice and Occupational Health and Safety (OHS) and hazardous substances legislation; schedule, supervise and record the service and maintenance of machinery and equipment; monitor machinery and equipment operations and maintenance and review risk assessments periodically to ensure a safe operating environment; assess staff capability in machinery maintenance and operation and provide training and mentoring; calculate the total running cost of machines. This unit applies to those whose job role it is to manage machinery and equipment in agriculture to ensure that machinery and equipment for the enterprise is managed in a way that allows the core business of the enterprise to operate efficiently.

Elements	Performance Criteria
1. Evaluate machinery and equipment	<p>1.1 Operations of available machinery and equipment are reviewed and matched to production processes and OHS requirements.</p> <p>1.2 Operation and servicing costs of machinery and equipment are calculated to justify total purchasing price.</p> <p>1.3 Productivity returns from machinery and equipment are estimated to identify benefit to production processes.</p> <p>1.4 Machinery and equipment replacement cycles are monitored to identify improvement options and maximize life cycles of components.</p> <p>1.5 Machinery and equipment are accessed through appropriate procurement options.</p>
2. Coordinate maintenance	<p>2.1 Maintenance and service cycles are identified and scheduled to ensure servicing is according to manufacturer's specifications and production processes.</p> <p>2.2 Storing and housing of machinery and equipment are costed and organized.</p> <p>2.3 Maintenance is documented and recorded to ensure operational and service history.</p> <p>2.4 OHS hazards in the workplace are identified, risk assessed, and risk controls are recorded and reviewed according to enterprise requirements.</p> <p>2.5 Suitable Personal Protective Equipment is provided, used, maintained and stored according to OHS requirements.</p>

	2.6 Repair and maintenance routines are developed and monitored according to manufacturer's specifications and OHS requirements.
3. Monitor operation	<p>4.1 Consumables and operational support materials are made available, maintained and disposed of according to enterprise requirements.</p> <p>4.2 Environmental implications and workplace safety practices are monitored according to OHS and enterprise requirements.</p> <p>4.3 Operational procedures are cleared, documented and followed according to manufacturer's specifications.</p> <p>4.4 Operators are provided with competent instruction and appropriate supervision according to OHS requirements.</p>

Variable	Range
Machinery and equipment	<p>May include:</p> <ul style="list-style-type: none"> • hydraulic equipment • agricultural and horticultural machinery and equipment • engines • irrigation equipment • earth moving equipment • spraying equipment • solar and wind powered equipment • lifting/elevated equipment • all vehicles/motorcycles • all types of park and turf maintenance machinery and equipment
Procurement options	<p>May include:</p> <ul style="list-style-type: none"> • leasing, hiring, hire purchase • purchasing, share/part-purchasing • renting, and barter
Storing and housing	<p>May include:</p> <ul style="list-style-type: none"> • On site, off site, seasonal, covered • open air, security and protected
OHS hazards	<p>May include:</p> <ul style="list-style-type: none"> • exposure to loud noise and fumes, solar radiation, dust, and hazardous substances • oil and grease spills • electricity • mechanical malfunctions and entanglement with machinery • equipment from exposed moving parts including hydraulics
Personal Protective Equipment	<p>May include:</p> <ul style="list-style-type: none"> • boots, hat/hard hat, overalls, gloves, • protective eyewear, safety harness, • hearing protection, respirator or face mask • sun protection (sun hat, sunscreen)

OHS requirements	<p>May include:</p> <ul style="list-style-type: none"> • Safe systems and procedures for: <ul style="list-style-type: none"> ➤ operating and maintaining machinery and equipment including hydraulics and guarding of exposed moving parts ➤ hazard and risk control ➤ manual handling including lifting and carrying the provision of safety decals and signage ➤ handling, application and storage of hazardous substances ➤ outdoor work including protection from solar radiation, dust and noise ➤ lock out or danger tag procedures ➤ protection of people in the workplace ➤ the appropriate use, maintenance and storage of personal protective clothing and equipment
Consumables and operational support materials used and maintained	<p>May include:</p> <ul style="list-style-type: none"> • fuel, oils, lubricants, and battery levels • wheels, tyres, • fan belts, leads, lines, connections, and air filters
Enterprise requirements	<p>May include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOP) • industry standards • production schedules • Material Safety Data Sheets (MSDSs) • work notes, minimizing downtime, product labels • manufacturers specifications, operator's manuals • enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and OHS procedures
Environmental implications	<p>May include:</p> <ul style="list-style-type: none"> • Negative environmental impacts may result from excessive noise and exhaust emissions, • the incorrect use and disposal of maintenance debris (oil containers, chemical residues), and hazardous substances (fuel, fertilizer) • run-off flows of water and cleaning agents from servicing, • maintenance and cleaning activities, • soil disturbance and dust problems from machinery and equipment operation

Evidence Guide	
Critical aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • develop machinery and equipment operation and maintenance procedures in compliance with environmental Codes of Practice and OHS and hazardous substances legislation • schedule, supervise and record the service and maintenance of machinery and equipment • monitor machinery and equipment operations and maintenance and review risk assessments periodically to

	<p>ensure a safe operating environment</p> <ul style="list-style-type: none"> • examine the specific needs of the production process and assess the applicability of specific kinds of machinery and equipment to these processes • conduct detailed testing and evaluation of the machinery and equipment • employment of safe workplace practices including the elimination of occupational health and safety hazards, • an awareness of enterprise environmental practices to minimize negative impact • assess staff capability in machinery maintenance and operation and provide training and mentoring • calculate the total running cost of machines 		
<p>Underpinning Knowledge and Attitudes</p>	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • servicing and maintaining machinery and equipment within area of responsibility • methods of calculating the cost of machines and their contribution • training and instruction techniques for directing the learning of staff • monitor machinery and equipment operations • identify and remove potential workplace hazards • evaluate machinery and equipment • identify skill needs of staff • keep records, including machine maintenance histories • use written and oral information about workplace requirements • plan and organise work arrangements • communicate orally, document plans and write reports for staff and management • calculate resources, machinery and equipment and servicing costing • identifying, assessing and controlling hazards • relevant OHS and environmental issues, legislative requirements and Codes of Practice • OHS hazard identification, risk assessment and developing risk controls • environmental legislation and Codes of Practice with regard to maintenance of machinery and equipment, disposal of wastes and hazardous substances • legislative and enterprise requirements for OHS 		
<p>Underpinning Skills</p>	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • identify hazards and implement safe systems of work • monitor machinery and equipment operations • evaluate machinery and equipment • identify skill needs of staff • identifying, assessing and controlling hazards • use literacy skills to fulfil job roles as required by the organisation; The level of skill may range from reading and understanding documentation to completion of written reports 		
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	<ul style="list-style-type: none"> • hazard identification, assessment and control • Environmental Codes of Practice with regard to maintenance of machinery and equipment and hazardous substances • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and Equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competency may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competency may be assessed in the work place or in a simulated work place setting

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Implement a Machinery Management System
Unit Code	AGR FME5 03 0714
Unit Descriptor	This unit covers the process of implementing a machinery management system and requires the ability to identify machinery and equipment requirements for the property, select and manage the range of machinery services provided by external suppliers, and manage machinery maintenance and operation. Implementing a machinery management system requires knowledge of cultural operations and their associated machinery requirements, costs associated with the use of machinery, maintenance requirements of machinery and equipment, storage and housing requirements of machinery, negotiation and the development of agreements, safe operating procedures for machinery, and systems for monitoring machinery maintenance and operation.

Elements	Performance Criteria
1. Identify machinery and equipment requirements for the property	<p>1.1 Machinery and equipment requirements are identified for the enterprises being conducted.</p> <p>1.2 Alternative options to machinery ownership are evaluated for applicability.</p> <p>1.3 Storage and housing requirements for machinery and equipment are identified and addressed.</p> <p>1.4 Machinery innovations are monitored and assessed for applicability.</p> <p>1.5 Inventory of machinery and equipment is maintained as required by the enterprise.</p>
2. Select and manage the range of machinery services provided by off-farm suppliers	<p>2.1 Services to be provided by off-property suppliers are identified.</p> <p>2.2 Criteria to select and monitor the provision of services are developed.</p> <p>2.3 Agreements and transactions are appropriately recorded and monitored.</p>
3. Manage machinery maintenance	<p>3.1 Maintenance requirements of machinery and equipment are determined from manufacturer's instructions, and maintenance schedules are established.</p> <p>3.2 Systems for recording machinery use and maintenance are established.</p> <p>3.3 Machinery maintenance is monitored to ensure adherence to schedules and manufacturer's instructions.</p>
4. Manage machinery and equipment operation	<p>4.1 Machinery and equipment use is monitored and recorded according to enterprise requirements.</p> <p>4.2 Machinery operation is monitored to ensure compliance with manufacturer's instructions.</p>

	<p>4.3 Procedures for the safe operation of machinery are determined and adherence to safe procedures is monitored and ensured.</p> <p>4.4 Staff are trained in the safe operation of machinery and the required procedures for the maintenance of machinery</p>
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Variable	Range
Machinery and Equipment	include all farm machinery and attachments, and stationary and mobile plant, used by the enterprise
Services	might include repair and overhaul services, contracted machinery operations, and parts suppliers
Agreements	include those that cover the conditions for use and operation of shared equipment, and agreements negotiated with contractors and other service providers
Staff	will include family and non-family labour, casual and permanent labour

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • identify and describe cultural operations and their associated machinery requirements • calculate costs associated with the use of machinery • identify maintenance requirements of machinery and equipment • apply storage and housing requirements of machinery • apply and monitor safe operating procedures for machinery • select and manage the range of machinery services provided by off-farm suppliers • plan manage machinery maintenance • plan machinery and equipment operation
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • cultural operations and their associated machinery requirements • costs associated with the use of machinery • maintenance requirements of machinery and equipment • storage and housing requirements of machinery • negotiation and the development of agreements • safe operating procedures for machinery • systems for monitoring machinery maintenance and operation • staff training
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • identify machinery and equipment requirements for the property or enterprise • select and manage the range of machinery services provided by off-farm suppliers • manage machinery maintenance • manage machinery and equipment operation

Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competency may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competency may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Plan and Manage Infrastructure Requirements
Unit Code	AGR FME5 04 0714
Unit Descriptor	This unit covers planning and managing infrastructure requirements and defines the standard required to: identify infrastructure requirements for the enterprise; source, construct and/or modify infrastructure to meet enterprise requirements; develop an infrastructure maintenance program, including scheduling and responsibilities; establish a recording system for infrastructure purchase, construction and maintenance. This unit applies to those whose job role involves planning and managing infrastructure requirements in agricultural or production horticultural enterprises.

Elements	Performance Criteria
1. Determine infrastructure requirements	<p>1.1 Information regarding the characteristics of the products and their respective market requirements are accessed.</p> <p>1.2 Characteristics of the land under production and the production processes to be used are confirmed from colleagues and other planning processes.</p> <p>1.3 Historical data, including recent data are identified from organisational records and accessed for input to infrastructure planning processes.</p> <p>1.4 Information regarding other organisational planning processes and potential for improvements or innovations are collected and used to inform the infrastructure planning process.</p> <p>1.5 Requirements of the organisation are taken into consideration during analysis.</p> <p>1.6 All available information are analysed and the infrastructure required to efficiently achieving the targeted production requirements are identified and compared with those existing and available in the organisation.</p> <p>1.7 Occupational Health and Safety (OHS) hazards are identified, risks assessed and suitable controls incorporated into the planning process.</p> <p>1.8 Replacements, purchases and sales of plant and vehicles are planned and budgeted for according to organisational policies and procedures.</p> <p>1.9 Details regarding infrastructure requirements are used as input to other organisational planning processes.</p>
2. Obtain, prepare or build infrastructure	<p>2.1 Solutions are identified to bridge the gaps between required and existing infrastructure.</p> <p>2.2 Preferred solution is determined to fill gaps in required infrastructure from a cost benefit analysis.</p>

	<p>2.3 Negotiations are undertaken to obtain infrastructure or component at the best rate for the organisation.</p> <p>2.4 Work required for existing infrastructure preparation is organised and undertaken as necessary.</p> <p>2.5 Works required are planned and commissioned according to organisation requirements.</p> <p>2.6 All alterations are given due consideration to infrastructure or new developments to environmental and waste management requirements.</p>
3. Manage infrastructure	<p>3.1 Infrastructure maintenance programs including scheduling and responsibilities are determined.</p> <p>3.2 Replacements, purchases and sales of plant and vehicles are undertaken according to plans made, and are in line with organisation policies and guidelines.</p> <p>3.3 Any reallocations of land required are undertaken with the planning and consultation required by the organisation, and within all relevant guidelines and regulations.</p> <p>3.4 Situations that require unplanned maintenance are managed within organisation guidelines and policy.</p> <p>3.5 Checks are made to ensure that program specifications are adhered to and amendments made where necessary.</p> <p>3.6 Checks are made to ensure that all OHS requirements are adhered to, including the appropriate use of personal protective equipment.</p> <p>3.7 Checks are made to ensure that potential detrimental environmental impacts are minimised or eliminated.</p>
4. Record and manage information	<p>4.1 Data, observations and documentation recorded during the production cycle are analysed against the plan according to organisation guidelines.</p> <p>4.2 Recommendations are prepared for future plans based on the analysis of the data.</p> <p>4.3 A report that documents the plans implementation is prepared according to the organisations requirements and guidelines.</p> <p>4.4 Records and documentation are created, maintained and kept as described in the infrastructure plan, the OHS requirements, and machinery and equipment management programs.</p> <p>4.5 Records and documentation are completed clearly and accurately throughout production in the organisation.</p> <p>4.6 The record keeping system that is used ensures that required information is made available, accessible, meaningful and useful.</p>

Variable	Range
Infrastructure	<p>May include:</p> <ul style="list-style-type: none"> • Buildings, sheds, shelters • Fences, stock yards, stock handling structures • water supply systems • roads, tracks • soil conservation works • dams, irrigation and drainage channels • silage pits, and/or grain and fodder storage • monitoring systems • information technology systems

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • identify infrastructure requirements for the enterprise • source, construct and/or modify infrastructure to meet enterprise requirements • develop an infrastructure maintenance program including scheduling and responsibilities • establish a recording system for infrastructure purchase, construction and maintenance
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • sustainable land use principles and practices • property planning, financial management and enterprise budgeting systems and procedures • environmental controls and codes of practice available to the organisation • relevant legislation and regulations relating to OHS, contractor engagement, chemical use and application, and machinery use • sound management practices and processes to minimise noise odours and debris from production processes • sustainable land use principles and practices applicable in the region • relevant legislation and regulations relating to soil and water degradation issues, and chemical use
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • interpret monitored information on production processes • interpret, analyse and extract information from a range sources such as professional literature, legal documents, discussions, and workshops • identify, build and use network and support groups • recognise potential opportunities to use or install more environmentally efficient systems or equipment • assess, then adopt, profitable innovations • planning • calculating volumes areas and distances • cost benefit analyses observe • identify and react appropriately to environmental implications and OHS hazards

	<ul style="list-style-type: none"> • use literacy skills to fulfil job roles as required by the organisation • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Plan and Monitor Operation Processes
Unit Code	AGR FME5 05 0714
Unit Descriptor	This unit covers planning and monitoring operation processes and defines the standard required to: identify operation processes required to achieve targeted operation; establish production targets for each enterprise and each production; schedule operation processes with monitoring points and performance indicators; evaluate operation processes and make modifications; create and maintain records and documentation as described in the operation plan. This unit is likely to be undertaken alone or under broad guidance. Responsibility for the planning and management of the work of others may be involved.

Elements	Performance Criteria
1. Determine operation process requirements	<p>1.1 Information regarding the characteristics of products being grown or refined/manufactured and their respective market requirements is accessed.</p> <p>1.2 Characteristics of the land under production and the quality and amount of existing infrastructure are confirmed from colleagues and other planning processes.</p> <p>1.3 Historical data, including recent data from organisational records are identified and accessed for input to production planning.</p> <p>1.4 Information regarding other organisational planning processes and potential for improvements or innovations is collected and used to inform production planning.</p> <p>1.5 Requirements of the organisation are taken into consideration during analysis.</p> <p>1.6 Operation processes required to efficiently achieve the targeted operation requirements are identified in line with organisational policies and compared with those that currently exist.</p> <p>1.7 Details regarding operation planning are used as input to other organisational planning processes.</p>
2. Determine monitoring requirements and systems	<p>2.1 Operation targets for each enterprise and each product are established from the range of organisational management and strategic plans.</p> <p>2.2 Scheduling for operation processes is determined by taking varying organisational factors into consideration.</p> <p>2.3 Environmental and waste management controls are established and specifically included in the production plan.</p> <p>2.4 Monitoring points and performance indicators for the operation process are established using target, environmental management and scheduling information.</p>

	<p>2.5 Prepared risk management strategies are put into place and acted upon when necessary.</p> <p>2.6 A plan that documents the decisions taken, the assessments made, the targets established, and any specific issues that relate to environmental and Occupational Health and Safety (OHS) risks is prepared.</p>
3. Monitor/evaluate effectiveness of operation processes	<p>3.1 Checks are made to ensure that the performance indicators, targets, and specifications are being met and amendments to the process made where necessary.</p> <p>3.2 The effectiveness of the operation processes is evaluated at key points and adjustments are made as necessary.</p> <p>3.3 Environmental impacts and OHS hazards relating to operation processes are identified, monitored and assessed throughout the production cycle.</p> <p>3.4 Modifications are made to the operation process when necessary by shifting priorities and results.</p> <p>3.5 Data, observations and documentation from the operation process are analysed against the plan according to organisation guidelines.</p>
4. Record and manage information	<p>4.1 Recommendations for future plans are prepared based on the analysis of the data.</p> <p>4.2 A report that documents the plans implementation is prepared according to the organisations requirements and guidelines.</p> <p>4.3 Records and documentation are created, maintained and kept as described in the production plan, the OHS requirements, and machinery and equipment management programs.</p> <p>4.4 The recordkeeping system that is used ensures that required information is made available, accessible, meaningful and useful.</p>

Variable	Range
The operation process	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • land clearing • ploughing • subsoiling • harrowing • levelling/land shaping • furrowing • planting • Fertilizing • spraying • cultivating • harvesting • transporting • the resources, personnel, methodology, and any between them for an agricultural or horticultural enterprise

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • identify operation processes required to achieve targeted production • establish operation targets for each enterprise and each product, crop, herd, or flock • schedule operation processes with monitoring points and performance indicators • evaluate operation processes and make modifications • create, and maintain records and documentation as described in the operation plan
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • environmental controls and codes of practice available to the organisation • relevant legislation and regulations relating to OHS, contractor engagement, chemical use and application, and vehicle and plant use • sound management practices and processes to minimise noise, odours and debris from production processes • sustainable land use principles and practices applicable in the region • planning processes • cost benefit analysis • relevant legislation and regulations, such as those relating to soil and water degradation issues, animal health and welfare, and chemical use
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • interpret monitored information on production processes • interpret, analyse and extract information from a range sources such as professional literature, legal documents, discussions and workshops • identify, build and use network and support groups • observe, identify and react appropriately to environmental implications and OHS hazards • assess, then adopt profitable innovations • set yield targets and objectives and estimate timelines • prepare enterprise budgets and calculate financial returns • Use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities

Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Collect and Manage Data
Unit Code	AGR FME5 06 0714
Unit Descriptor	This unit covers the process of collecting, analysing and managing data and defines the standard required to: identify data requirements and establish sampling and data collection techniques; collect and collate data using standardised recording sheets and systems; review sampling and data collection techniques based on validity and reliability of the data; manage data to facilitate retrieval and analysis; analyse data using appropriate statistical and analytical techniques; draw conclusions based on reasoned argument and appropriate evidence; produce a report in required format with information and data presented to support decision making. This unit applies to managers and supervisors with a job function to determine the type and extent of data to be collected, access and collate data, evaluate data, manage, analyse and retrieve data.

Elements	Performance Criteria
1. Determine the type and extent of data to be collected	<p>1.1 Data requirements are clearly defined and communicated to all staff involved in data collection.</p> <p>1.2 Relevant data sources are identified.</p> <p>1.3 Type and extent of data required are clearly defined.</p> <p>1.4 Occupational Health and Safety (OHS) hazards associated with data collecting are identified.</p> <p>1.5 Data collection methods and techniques are clearly defined relative to data requirements.</p>
2. Access and collate data	<p>2.1 Data collection sheets are formatted to assist collection.</p> <p>2.2 Data is researched and/or collected from field sources according to enterprise guidelines and with standard research approaches.</p> <p>2.3 Data is collated by appropriate electronic means.</p> <p>2.4 Appropriateness of data is monitored and recorded during collection.</p> <p>2.5 Information is researched using appropriate methods and technologies.</p> <p>2.6 Sources of information are regularly reviewed for usefulness, validity, reliability and cost.</p> <p>2.7 Channels and sources of information are used effectively.</p> <p>2.8 Opportunities are taken to establish and maintain contacts with those who may provide useful information.</p> <p>2.9 Appropriate OHS requirements and work practices are followed.</p>

3. Evaluate data	<p>3.1 Data collected is made relevant, valid and sufficient.</p> <p>3.2 Where data is unclear or difficult to interpret, clarification and assistance is sought.</p> <p>3.3 Where data is inadequate, additional data is obtained.</p> <p>3.4 Information is analysed for its validity and reliability.</p>
4. Manage and retrieve data	<p>4.1 Data is stored by appropriate electronic means.</p> <p>4.2 Data is presented using appropriate graphical aids and techniques.</p> <p>4.3 Data is assembled and provided to the manager/client as required and in accordance with standard research approaches.</p> <p>4.4 Data is retrieved as required.</p> <p>4.5 New methods of recording and storing data are suggested/ introduced as needed.</p>
5. Analyse and interpret data	<p>5.1 Data is analysed using appropriate statistical and analytical techniques.</p> <p>5.2 Data is interpreted to determine its significance, validity and reliability.</p> <p>5.3 Findings are reported based on the analysis and interpretation of the data.</p> <p>5.4 Data is organised into a suitable report format to aid decision-making.</p> <p>5.5 Conclusions are drawn based on reasoned argument and appropriate evidence.</p>

Variable	Range
Data	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • primary and secondary sources including: <ul style="list-style-type: none"> ➤ field work and trials ➤ research materials ➤ published books ➤ academic reports ➤ industry reports ➤ colleagues ➤ computer software ➤ internet ➤ newspapers ➤ photographic data ➤ journals ➤ industry publications ➤ industry specialists and experts

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • identify data requirements and establish sampling and data collection techniques

	<ul style="list-style-type: none"> • collect and collate data using standardised recording sheets and systems • review sampling and data collection techniques based on validity and reliability of the data • manage data to facilitate retrieval and analysis • analyse data using appropriate statistical and analytical techniques • draw conclusions based on reasoned argument and appropriate evidence • produce a report in required format with information and data presented to support decision making
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • data collection techniques and procedures • data recording and evaluation techniques • data analysis and interpretive techniques • data storage and retrieval methods • data reporting methods
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • determine the type and extent of data to be collected • access and collate data • evaluate data • manage and retrieve data • analyse the data • interpret the data • follow safe work practices • use literacy skills to fulfil job roles as required by the organisation; the level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Develop a Whole Farm Machinery Plan
Unit Code	<u>AGR FME5 07 0714</u>
Unit Descriptor	This unit covers developing a whole farm plan and defines the standard required to: audit the natural resources of the property; monitor legal requirements impacting on the management of the property; develop management strategies to address the key natural resource management issues of water, soils, vegetation and wildlife; develop management strategies to address natural resource management issues; and integrate business objectives and production plans with sustainable land management in a whole farm plan. This unit applies to farm managers whose job includes developing a whole farm plan.

Elements	Performance Criteria
1. Determine directions for the business	<p>1.1 Long-term directions and purposes of the business are established through identification and analysis of the values, expectations and personal goals of the people involved.</p> <p>1.2 Business and personal Strengths, Weaknesses, Opportunities and Threats (SWOT) are identified.</p> <p>1.3 Strategies to address the SWOT are developed consistent with the business vision.</p>
2. Audit the natural resources and infrastructure of the property	<p>2.1 Physical characteristics of the soil resource are identified and recorded.</p> <p>2.2 Soil map of property is drawn and land classes are recorded using classification terminology.</p> <p>2.3 Land capability is determined and land management options for each land class are identified.</p> <p>2.4 Natural property features and infrastructure are shown on property map.</p> <p>2.5 Areas at risk of soil degradation are identified.</p> <p>2.6 Native vegetation is classified and condition assessed.</p> <p>2.7 Endangered species are identified as appropriate.</p> <p>2.8 Other natural resource issues are identified as appropriate to the property.</p> <p>2.9 Infrastructure is marked to assist with maintenance and planning.</p>
3. Monitor legal requirements impacting on the management of the property	<p>3.1 Current knowledge of relevant Acts and regulations impacting on the property is maintained.</p> <p>3.2 Legal requirements are addressed through management plans.</p>

4. Develop management strategies to address natural resource management issues	<p>4.1 Property improvement plans are developed, costed and prioritised to assist natural resource management.</p> <p>4.2 Plans are developed to repair land degradation.</p> <p>4.3 Strategies to address water supply and water management, vegetation and revegetation management, and wildlife management are prepared as appropriate to the property.</p> <p>4.4 Strategies for weed and pest management are developed.</p> <p>4.5 Plans to address fire risk/fire management are developed as appropriate.</p>
5. Review whole farm plan	<p>5.1 Feed back is compiled and analysed systematically.</p> <p>5.2 Plans are reviewed and revised to meet changing circumstances.</p>

Variable	Range
Whole farm plans	May include: <ul style="list-style-type: none"> • all production land and natural areas • waterways and physical features and improvements

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: <ul style="list-style-type: none"> • audit the natural resources of the property • monitor legal requirements impacting on the management of the property • develop management strategies to address the key natural resource management issues of water, soils, vegetation and wildlife • develop management strategies to address natural resource management issues • integrate business objectives and production plans with sustainable land management in a whole farm plan
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • SWOT analysis • sustainable land management practices • property planning processes and approaches • land capability • water, vegetation, soil, fire and wildlife management strategies • legal requirements impacting on whole farm planning • risk management
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> • assessment of soil physical characteristics • determine existing and required infrastructure requirements • identification and determination of Natural Resource Management (NRM) requirements • ability to determine land-use capability • use literacy skills to fulfil job roles as required by the

	<p>organisation; the level of skill may range from reading and understanding documentation to completion of written reports</p> <ul style="list-style-type: none"> • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Prepare Reports
Unit Code	AGR FME5 08 0714
Unit Descriptor	This unit covers the process of preparing comprehensive reports for a rural, horticultural or land management setting and defines the standard required to: identify the purpose of the report and verify it with the client; conduct research and compile information; draw conclusions from research supported by reasoned argument and supporting information; make recommendations if required and reference to information and conclusions; produce a correctly formatted report document that uses appropriate language and terminology, is arranged in a logical order, and provides details on information sources and consultation. This unit applies to enterprise or project managers for a rural, horticultural or land management enterprise or project. The task is carried out independently with access to technical information and support where required.

Elements	Performance Criteria
1. Research material	1.1 Topic of the report is identified and described. 1.2 Sources of information are determined. 1.3 Information appropriate to the task is collected and organised according to enterprise standards.
2. Evaluate information	2.1 Information collected is made relevant and sufficient to provide a full report. 2.2 Where information is unclear or difficult to understand, clarification and assistance is sought. 2.3 Where available information is inadequate, additional information is obtained. 2.4 Information is assessed for its validity and reliability, and organised into a suitable form to aid decision-making. 2.5 Conclusions are drawn from relevant information based on reasoned argument and appropriate evidence.
3. Produce a document	3.1 Language is made applicable to the task and audience. 3.2 The document is organised logically, structured and balanced according to purpose, audience and context. 3.3 The document is formatted and presented according to business and enterprise standards. 3.4 Conclusions are reached to reflect the stated objectives of the report. 3.5 Preparation is completed within the specified timeframe. 3.6 Enterprise and Occupational Health and Safety (OHS) requirements and procedures are followed.
4. Deliver an oral presentation	4.1 Language is made applicable to the task and audience.

	<p>4.2 Presentation is organised logically, structured and balanced according to purpose, audience and context.</p> <p>4.3 Concise and well presented support materials are used in oral presentations to reflect industry standards.</p> <p>4.4 Efficient time is used to allow clear presentation of the desired topic.</p> <p>4.5 Oral presentation is delivered within a specified time.</p>
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Variable	Range
Report	<p>May include:</p> <ul style="list-style-type: none"> • a range of sources of information that reports may be based on including: <ul style="list-style-type: none"> ➤ field work ➤ research materials ➤ published books ➤ academic reports ➤ industry reports ➤ colleagues ➤ computer software ➤ internet ➤ newspapers ➤ journals ➤ industry publications ➤ industry specialists and experts

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • identify the purpose of the report and verify it with the client • conduct research and compile information • draw conclusions from research supported by reasoned argument and supporting information • make recommendations if required and reference to information and conclusions • produce a correctly formatted report document that uses appropriate language and terminology, is arranged in a logical order, and provides details on information sources and consultation
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • information and research sources • report structure and presentation • public presentation techniques and approaches
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • research material • evaluate information • use literacy skills to fulfil job roles as required by the organisation; the level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including

	<p>questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views</p> <ul style="list-style-type: none"> • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Implement and Monitor Farm Transport Operation
Unit Code	AGR FME5 09 0714
Unit Descriptor	<p>This unit involves the skills and knowledge required to implement and monitor transport logistics in accordance with relevant regulatory requirements and workplace procedures, including mobilising resources, monitoring consignment(s) tracking, and implementing a contingency management strategy. Work must be carried out in compliance with the relevant regulations, standards and codes of practice, including the EDG Code. Work is under general guidance on progress and outcomes of work. It requires discretion and judgement for self and others in planning and using resources, services and processes to achieve required outcomes within workplace policy and procedures. A range of opportunities may be used to develop the work area and to support the development of work systems, innovative strategies to deal with contingencies and to encourage the achievement of the workplace's goals and key performance objectives by the work area and the individuals and teams within it. The unit generally applies to those with responsibility for resource coordination and allocation and provides leadership of others individually or in teams.</p>

Elements	Performance Criteria
1. Mobilise resources	<p>1.1 Optimal resource level is acquired to meet the requirements of the operational schedule.</p> <p>1.2 Relevant regulatory and insurance requirements are determined and implemented.</p> <p>1.3 Allocated resources are assessed and monitored to ensure operational effectiveness and efficiency.</p> <p>1.4 Where deficiencies or over-supply are apparent to resource allocation, changes are undertaken in accordance with enterprise procedures.</p>
2. Coordinate multi-modal transport activities	<p>2.1 Facilities, personnel and equipment are made ready to accommodate interchange functions.</p> <p>2.2 Security arrangements are invoked as required.</p> <p>2.3 Loading and unloading operations are conducted in accordance with operation schedule and applicable statutory requirements, codes of practice and enterprise procedures.</p> <p>2.4 Relevant documentation is completed/ updated to accord with operational schedule and reporting requirements.</p>
3. Monitor consignment(s) tracking	<p>3.1 Consignment tracking systems are monitored against workplace quality standards.</p> <p>3.2 Variations from workplace quality standards are identified and appropriate action is initiated to rectify the identified problems or to institute any required improvements.</p>

4. Implement contingency management strategy	<p>4.1 Operational schedule is continually reviewed in light of information updates, reports and feedback.</p> <p>4.2 The nature, extent and impact of any issues or incidents are identified and assessed against contingency management strategy.</p> <p>4.3 Relevant information is processed to establish priorities and responses for dealing with issues or incidents.</p> <p>4.4 Operations are redirected and controlled to meet changes in transport environment and tasks in accordance with enterprise procedures.</p> <p>4.5 Liaison is initiated and maintained with organisations/ individuals affected by changed operational schedules.</p> <p>4.6 Actions undertaken are clearly documented and filed.</p>
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Variable	Range
Requirements	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • collection and distribution destination • transport duration times • type and compatibility of load • transport mode(s) and capacity • return freight • fatigue management • use of designated routes • site restrictions and procedures • use of safety and personal protective equipment • systems and facilities for transport logistics • specialised lifting and/or handling equipment • incident/accident breakdown procedures • additional gear and equipment • noise restrictions • hours of operation • authorities and permits • communications equipment
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> • by day or night
Documentation	<p>May include:</p> <ul style="list-style-type: none"> • Ethiopian and international codes of practice and regulations relevant transport logistics including the EDG Code where applicable • workplace operating procedures and policies • supplier and/or client instructions • operations manuals, job specifications and procedures and induction documentation • transport routes and timetables • manufacturers specifications for equipment and goods • suppliers advice • material safety data sheets

	<ul style="list-style-type: none"> • dangerous goods documentation where applicable including dangerous goods declarations • Safe Working Limits (SWL) and Working Load Limits (WLL) of load shifting equipment and storage facilities • communications technology equipment, oral, aural or signed communications • quality assurance standards and procedures • emergency procedures • relevant competency standards and training materials • relevant Ethiopian and international standards, criteria and certification requirements • QA plans, data and document control • conditions of service, legislation and industrial agreements including workplace agreements and awards
Consignments tracking systems	<p>May be:</p> <ul style="list-style-type: none"> • palletised • containerised • packages or loose • and in gas, liquid or solid form
Critical parameters for the evaluation of consignment loads	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • type, capacity, compatibility and capability of load • agreed delivery times and destination • pick-up and drop-off points • waiting, loading and unloading times
Workplace	<p>May involve:</p> <ul style="list-style-type: none"> • twenty-four hour operation • single and multi-site locations • large, medium and small workplaces
Work	<p>May be undertaken:</p> <ul style="list-style-type: none"> • in various work environments in the sections of the warehousing, storage, transport and distribution industries involved in transport logistics
Workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures
Transport	<p>May be:</p> <ul style="list-style-type: none"> • single or multi-modal <p>may involve:</p> <ul style="list-style-type: none"> • the use of designated routes
Modes of transport	<p>May include:</p> <ul style="list-style-type: none"> • road • rail • air • sea
Calculation of transport duration times	<p>May include:</p> <ul style="list-style-type: none"> • travelling • loading • unloading

	<ul style="list-style-type: none"> • change-over • standing times • with due regard to varying transit condition and environments (i.e. road conditions, traffic flows, weather, local government by-laws)
Strategies	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • re-negotiation of collection and/or delivery times • alternate transport mode(s) • outsourcing components of operation
Customers	<p>May be</p> <ul style="list-style-type: none"> • internal or external
Hazard management	<p>Is consistent with:</p> <ul style="list-style-type: none"> • the principle of hierarchy of control with elimination, substitution, isolation and engineering control measures being selected before safe working practices and personal protective equipment
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • other employees and supervisors • suppliers, potential customers and existing clients • relevant authorities and institutions • relevant government instrumentalities • emergency services • management and union representatives • industrial relations and OHS specialists • other maintenance, professional or technical staff
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF communications • bar code readers • oral, aural or signed communications
Personal protective equipment	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> • gloves • safety headwear and footwear • safety clothing • safety glasses • two-way radios and high visibility clothing
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> • codes and regulations relevant to transport logistics • Ethiopian and international regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances, • relevant Ethiopian and international standards and certification requirements • licence, patent or copyright arrangements • relevant state/territory OHS and environmental protection legislation

	<ul style="list-style-type: none"> • workplace relations regulations • workers compensation regulations • equal opportunity, equal employment opportunity and affirmative action legislation
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Evidence Guide	
Critical aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • the underpinning knowledge and skills • relevant legislation and workplace procedures • other relevant aspects of the range statement
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • communicate effectively with others when implementing and monitoring transport logistics • read and interpret transport schedules, regulatory requirements, customer instructions, workplace procedures and manuals relevant to the implementation and monitoring of transport logistics • prioritise work and coordinate self and others in relation to transport logistics activities • complete documentation related to the implementation and monitoring of transport logistics • operate electronic communication equipment to required protocol • provide leadership and work collaboratively with others when implementing and monitoring transport logistics • adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • promptly report and/or rectify any problems identified when implementing and monitoring transport logistics in accordance with regulatory requirements and workplace procedures • implement contingency plans for unanticipated situations that may arise during the implementation and monitoring of transport logistics • apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities • monitor work activities in terms of planned schedule • modify activities depending on differing operational contingencies, risk situations and environments • apply fatigue management knowledge and techniques • work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • select and apply appropriate application of technology, information systems and procedures • operate and adapt to differences in equipment in accordance with standard operating procedures • select and use required personal protective equipment conforming to industry and OHS standards
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • relevant regulations, codes of practice and legislative requirements including local and international regulations

	<p>relevant to transport logistics</p> <ul style="list-style-type: none"> • relevant OHS and environmental protection procedures and regulations • workplace procedures for the implementation and monitoring of transport logistics • problems that may occur during the implementation and monitoring of transport logistics and action that can be taken to resolve or report the problems • risks and hazards related to the implementation and monitoring of transport logistics and ways of controlling the risks involved • focus of operation of transport logistic systems, resources, management and workplace operating systems • transport and equipment applications, capacities, configurations, safety hazards and control mechanisms • code, regulatory, permit and licence requirements relevant to transport logistics • application of relevant Ethiopian standards and associated certification requirements • business policies and plans including procedures for outsourcing components of operations and engaging additional resources • workplace policies including issue resolution and grievance procedures • resource availability including the competencies of individuals in the team/group • the application of current competencies within functional activity • relevant workplace documentation procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Prepare and Monitor Budgets and Financial Reports
Unit Code	AGR FME5 10 0714
Unit Descriptor	This unit covers preparing and monitoring budgets and financial reports and defines the standard required to: prepare a budget using most likely costs and income; develop and monitor budgets in an enterprise; prepare financial reports to meet industry standards. This unit applies to enterprise managers who prepare and monitor budgets and financial reports in an agricultural, horticultural or land management enterprise.

Elements	Performance Criteria
1. Prepare a budget	<p>1.1 Information on past receipts and payments are obtained from previous records, compared to current prices and cost trends and compiled in a form that enables projections of future receipts and expenditures.</p> <p>1.2 A plan is prepared for a period which allows for expected expenditure and financial reporting requirements, using the 'most likely' prices and costs.</p>
2. Implement and monitor a budget	<p>2.1 Receipts and payments are monitored and reconciled against the original budget.</p> <p>2.2 Variances are identified against the original plan, and the impact on overall profit/loss and cash flow is calculated.</p> <p>2.3 Funds are allocated in accordance with budget objectives and parameters.</p> <p>2.4 Adjustments are made where necessary to respond to unacceptable variations.</p> <p>2.5 Budgets and plans are renegotiated/ restructured where necessary to optimise enterprise performance.</p>
3. Prepare financial report	<p>3.1 Records of financial performance are properly maintained within enterprise systems.</p> <p>3.2 Information with source documents is assembled according to the requirements of the report recipient.</p> <p>3.3 Documentation is forwarded in a timely and efficient manner.</p> <p>3.4 Non-financial objectives are reported in the context of overall enterprise performance.</p>

Variable	Range
Budgets	May include: <ul style="list-style-type: none"> recurrent operating or project based funds
Financial	May include: <ul style="list-style-type: none"> prepared for Taxation Commissioner

	<ul style="list-style-type: none"> • financing agencies • boards of management • committees • councils • executive management
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Evidence Guide	
Critical aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • prepare a budget using most likely costs and income • develop and monitor budgets in an enterprise • prepare financial reports to meet industry standards
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • budget formulation • financial information systems • business transactions • banking and reconciliation • standards for organisational recordkeeping and audit requirements
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • prepare a budget • monitor receipts and payments • negotiate and restructure budgets • implement and monitor a budget • maintain financial records • use literacy skills to fulfil job roles as required by the organisation; the level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Monitor and Review Business Performance
Unit Code	AGR FME5 11 0714
Unit Descriptor	This unit covers monitoring and reviewing business performance and defines the standard required: to gather and analyse data relating to enterprise performance; review operational structures to determine effectiveness; identify available resources to assess capacity; develop realistic performance indicators; review enterprise operations against performance indicators; plan to improve business performance by addressing results of review. This unit applies to those whose job role covers the functions associated with monitoring and reviewing the business performance of a rural enterprise.

Elements	Performance Criteria
1. Evaluate commercial performance	<p>1.1 Data relating to enterprise performance is gathered and analysed to identify historical and current performance.</p> <p>1.2 Operational structures are reviewed and analysed to determine the suitability of organisational processes to enterprise objectives.</p> <p>1.3 Enterprise strengths and weaknesses are evaluated against market conditions to determine current and future capacities.</p> <p>1.4 Enterprise objectives are evaluated to identify variations and scope for future development.</p>
2. Allocate and co-ordinate business resources	<p>2.1 Roles and responsibilities of personnel are identified and communicated.</p> <p>2.2 Resource requirements for enterprise are identified and costed using standard financial analysis techniques.</p> <p>2.3 Costs of ensuring sustainability of enterprise operations are calculated and factored into business planning for the enterprise.</p>
3. Identify performance requirements	<p>3.1 Performance indicators are developed and made realistic within available timeframes and resources.</p> <p>3.2 Factors inhibiting performance are identified and minimised against objectives.</p> <p>3.3 Market conditions are monitored and assessed based on relevant data and assumptions that are transferable and justifiable.</p> <p>3.4 Strategies and programs are prepared to promote the sustainability of operations and incorporated into enterprise procedures.</p>

4. Review business performance	<p>4.1 Enterprise operations are regularly reviewed to identify opportunities for improvements in performance.</p> <p>4.2 Impact of natural conditions on enterprise is monitored and anticipated to assess sustainability of resource use.</p> <p>4.3 Costs and estimates are compared with resource allocation.</p> <p>4.4 Operational plans are reviewed to determine schedule of activities.</p>
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Variable	Range
Data	May include: <ul style="list-style-type: none"> • sales figures • expected revenues • expenditures • attributable costs • market share figures • trends in consumer purchases • borrowing costs • transport costs • delivery times
Operational structures	May include: <ul style="list-style-type: none"> • management processes • reporting arrangements • decision-making authorities • financial accounting procedures • promotional activities • operational resources
Market conditions	May include: <ul style="list-style-type: none"> • product and service demand • availability of funds • cost of financing • supplier costs • delivery constraints • availability of substitutes • competitors
Standard financial analysis techniques	May include: <ul style="list-style-type: none"> • cost benefit analysis • 'what if?' analyses • time series and trend • expenditure and revenue ratios • break-even analysis • accounting standards • cash flow schedules
The indicators of business performance	May include: <ul style="list-style-type: none"> • sales targets • revenue estimates • waste reduction

	<ul style="list-style-type: none"> • erosion replacement and reversal • environmental sustainability • variable cost ratios • investment returns • diversification
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Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • gather and analyse data relating to enterprise performance • review operational structures to determine effectiveness • identify available resources to assess capacity • develop realistic performance indicators • review enterprise operations against performance indicators • plan to improve business performance by addressing results of review
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • rates of return for products and/or services • financial analysis techniques • structure and operation of small businesses relevant State/Territory Occupational Health and Safety (OHS) • legislative requirements • environmental conditions, positive environmental practices and negative impact minimisation measures • human resource requirements for the enterprise • transport requirements for the enterprise • enterprise/property improvement requirements • market performance in commodities • statutory marketing requirements • regulations related to exports of Ethiopian agricultural products • animal husbandry
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • analyse market requirements • match the enterprise to resources • set enterprise objectives and make financial and economic determinations • monitor and manage resources (human, physical, environmental) • evaluate land capability and natural resources (where applicable to the enterprise) • research, analyse and evaluate enterprise information and requirements • use literacy skills to fulfil job roles as required by the organisation; the level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views

	<ul style="list-style-type: none"> • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Prepare Estimates, Quotes and Tenders
Unit Code	<u>AGR FME5 12 0714</u>
Unit Descriptor	This unit covers the processes involved with preparation of estimates, quote and tenders and defines the standard required to: research the details of the quoted service and clarify with the client; identify requirements for estimate, quote or tender including format, specifications and deadline for submission; identify and cost the resources and services required to fulfil the tender and check for availability; investigate options for supplies, services, contractors and consultants with current pricing structures and availability; develop a work schedule with timelines and expenditure; consider potential problems and risks and develop contingency plans; develop detailed costing sheets with the final quoted cost, including an estimated margin for risk; submit the completed tender to the client with supporting information including details of organisations previous work and client feedback; seek feedback from the client to ensure information supplied is sufficient. This unit applies to those who prepare estimates, quotes and tenders in a horticultural, agricultural or land management enterprise.

Elements	Performance Criteria
1. Carry out preliminary planning activities for estimating, quoting and/or tendering	<p>1.1 Nature and scope of the project are identified in consultation with the client according to enterprise policy.</p> <p>1.2 Format, specifications and deadline for submission of the estimate, quote or tender are identified and confirmed with the client.</p> <p>1.3 Available relevant documentation is obtained and interpreted.</p> <p>1.4 Project site is inspected and reconciled with scaled drawings, project and other site plans in consultation with the client, agent or other authority.</p>
2. Determine resource requirements	<p>2.1 Detailed project information and monetary sums are interpreted and recorded from client specifications.</p> <p>2.2 Size, type and quantity of required project resources are identified and estimated according to client specifications.</p> <p>2.3 Sources are identified and evaluated for the procurement of suitable project resources consistent with client requirements.</p> <p>2.4 Appropriate tools and equipment are selected and used to calculate the correct size, type and quantity of each resource item.</p> <p>2.5 Unit and total cost for each resource item are calculated and documented.</p> <p>2.6 Necessary and appropriate contingency sums are interpreted and documented to complete the estimate, quote or tender.</p>

	2.7 Calculations are accurately recorded on a price summary sheet.
3. Prepare schedules for the estimate, quote or tender	<p>3.1 Works schedule is documented according to client specifications.</p> <p>3.2 Scheduling of resources is accurately documented consistent with the requirements of the works schedule.</p> <p>3.3 Scheduling of financial requirements is accurately documented according to enterprise guidelines.</p>
4. Prepare and document the estimate, quote or tender for submission to the client	<p>4.1 Estimate, quote or tender price is calculated and checked according to enterprise guidelines.</p> <p>4.2 Costed summaries and works, resource and financial schedules are compiled according to client specifications.</p> <p>4.3 Quality assurance requirements, enterprise customer service procedures, conventional formatting and industry standards are strictly adhered to in the development of documentation.</p> <p>4.4 Total estimate, quotation and/or tender are completed accurately and submitted to the client within the specified deadline.</p> <p>4.5 Further information is provided and adjustments made according to client requirements.</p>

Variable	Range
The subject of the estimate, quote or tender	<p>May include:</p> <ul style="list-style-type: none"> • works relating to agricultural production • horticultural production • amenity horticulture projects • conservation and land management-related projects

Evidence Guide	
Critical Aspects of Competence	<p>Must demonstrate knowledge and skills competence to:</p> <ul style="list-style-type: none"> • research the details of the quoted service and clarify with the client • identify requirements for estimate, quote or tender including format, specifications and deadline for submission • identify and cost the resources and services required to fulfil the tender and check for availability • investigate options for supplies, services, contractors and consultants with current pricing structures and availability • develop a work schedule with timelines and expenditure • consider potential problems and risks and develop contingency plans • develop detailed costing sheets with the final quoted cost, including an estimated margin for risk • submit the completed tender to the client with supporting information including details of organisations previous work and client feedback

	<ul style="list-style-type: none"> • seek feedback from the client to ensure information supplied is sufficient
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • relevant State and Federal legislation, awards, enterprise agreements and management policies relating to labour hire and employment terms • current pricing structures and options for supplies, services, contractors and consultants • enterprise and industry standards and practices for formatting, organising and presenting financial and quantitative information • business ethics in relation to confidentiality and the tendering process
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • research and evaluate information • comply with legislative requirements • use literacy skills to fulfil job roles as required by the organisation; the level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Negotiate and Monitor Contracts
Unit Code	<u>AGR FME5 13 0714</u>
Unit Descriptor	This unit covers the negotiation and monitoring of contracts and defines the standard required to: establish agreements with sources external to the enterprise; complete contract documentation; monitor the performance of contracts. This unit applies to those whose work involves negotiating contracts with clients and others.

Elements	Performance Criteria
1. Establish agreements with sources external to the enterprise	<p>1.1 The enterprise requirements of a business relationship are identified and defined with external sources.</p> <p>1.2 The ranges of acceptable outcomes are established from a negotiation.</p> <p>1.3 Contact is made with individuals, bodies or corporations, the appropriate individual is identified, and requirements of an agreement are discussed and mutually acceptable terms agreed.</p> <p>1.4 Sound practice and procedure are maintained for business meetings and all agreements documented.</p>
2. Complete contract documentation	<p>2.1 Requirements of the contract are clearly documented and understood by the relevant parties.</p> <p>2.2 Areas of ambiguity or concern are clarified and resolved.</p> <p>2.3 Conditions for service or supply are agreed between the parties including the determination of key performance indicators.</p> <p>2.4 Alternative processes are undertaken where agreement is unable to be reached in accordance with enterprise procedures.</p> <p>2.5 Negotiations are conformed to established enterprise requirements and relevant legislation.</p> <p>2.6 Contract documentation is signed and exchanged between the relevant parties.</p>
3. Monitor the performance of contracts	<p>3.1 The rights and obligations of parties are identified to a contract and appropriate methods of addressing non-performance are implemented.</p> <p>3.2 Professional and regulatory bodies available are identified and consulted to support commercial grievance processes, when required.</p> <p>3.3 Completion of contract is monitored against key performance indicators.</p> <p>3.4 Issues are advised in respect to non-compliance to the other party in writing.</p>

Variable	Range
Contract requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • quality or enterprise work specifications and procedures • manufacturer's specifications and/or supplier's handling and storage advice • workplace operating procedures and policies • supplier and/or client instructions • legal and contract documentation • Materials Safety Data Sheets (MSDSs) • communications technology equipment • personal and work area work procedures and practices • relevant State, Territory and Commonwealth legislative framework concerning contracts and trade practices • OHS in terms of duties of employers, employees, suppliers and contractors contracts • hazardous substances and dangerous goods • environment protection • equal opportunity • equal employment opportunity • affirmative action standards • certification requirements • license, patent or copyright arrangements • quality assurance and emergency procedures

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrate knowledge and skills to:</p> <ul style="list-style-type: none"> • establish agreements with sources external to the enterprise • complete contract documentation • monitor the performance of contracts
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • contract/commercial law applicable to the type of agreement • processes of formulation and negotiation of contracts • enterprise business policies and plans including procedures for maintenance of confidentiality • selection and appropriate application of technology, information systems and procedures
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • establish agreements with sources external to the enterprise • complete contract documentation • monitor the performance of contracts • use literacy skills to fulfil job roles as required by the organisation; the level of skill may range from reading and understanding documentation to completion of written reports • use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification,

	<p>negotiating solutions and responding to a range of views</p> <ul style="list-style-type: none"> • use numeracy skills to estimate, calculate and record complex workplace measures • use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Manage Project Quality
Unit Code	AGR FME5 14 0714
Unit Descriptor	This unit specifies the outcomes required to manage quality within projects. It covers determining quality requirements, implementing quality assurance processes, and using review and evaluation to make quality improvements in current and future projects.

Elements	Performance Criteria
1. Determine quality requirements	<p>1.1 Quality objectives, standards and levels are determined, with input from stakeholders and guidance of a higher project authority, to establish the basis for quality outcomes and a quality management plan.</p> <p>1.2 Established quality management methods, techniques and tools are selected and used to determine preferred mix of quality, capability, cost and time.</p> <p>1.3 Quality criteria are identified, agreed with a higher project authority and communicated to stakeholders to ensure clarity of understanding and achievement of quality and overall project objectives.</p> <p>1.4 Agreed quality requirements are included in the project plan and implemented as basis for performance measurement.</p>
2. Implement quality assurance	<p>2.1 Results of project activities and product performance are measured and documented throughout the project life cycle to determine compliance with agreed quality standards.</p> <p>2.2 Causes of unsatisfactory results are identified, in consultation with the client, and appropriate actions are recommended to a higher project authority to enable continuous improvement in quality outcomes.</p> <p>2.3 Inspections of quality processes and quality control results are conducted to determine compliance of quality standards to overall quality objectives.</p> <p>2.4 A quality management system is maintained to enable effective recording and communication of quality issues and outcomes to a higher project authority and stakeholders.</p>
3. Implement project quality improvements	<p>3.1 Processes are reviewed and agreed changes implemented continually throughout the project life cycle to ensure continuous improvement to quality.</p> <p>3.2 Project outcomes are reviewed against performance criteria to determine the effectiveness of quality management processes and procedures.</p> <p>3.3 Lessons learned and recommended improvements are identified, documented and passed to a higher project authority for application in future projects.</p>

Variable	Range
Quality objectives	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • requirements from the client and other stakeholders • requirements from a higher project authority • negotiated trade-offs between cost, schedule and performance • those quality aspects which may impact on customer satisfaction
Quality management plan	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • established processes • authorizations and responsibilities for quality control • quality assurance • continuous improvement
Quality management methods, techniques and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • brainstorming • benchmarking • charting processes • ranking candidates • defining control • undertaking benefit/cost analysis • processes that limit and/or indicate variation • control charts • flowcharts • histograms • pareto charts • scatter gram • run charts
Quality control	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • monitoring conformance with specifications • recommending ways to eliminate causes of unsatisfactory performance of products or processes • monitoring of regular inspections by internal or external agents
Improvements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • formal practices, such as total quality management or continuous improvement • improvement by less formal processes which enhance both the product quality and processes of the project, for example client surveys to determine client satisfaction with project team performance

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • lists of quality objectives, standards, levels and measurement criteria • records of inspections, recommended rectification actions and quality outcomes • management of quality management system and quality management plans • application of quality control, quality assurance and

	<p>continuous improvement processes</p> <ul style="list-style-type: none"> • records of quality reviews • lists of lessons learned and recommended improvements <p>Processes that could be used as evidence include:</p> <ul style="list-style-type: none"> • how quality requirements and outcomes were determined for projects • how quality tools were selected for use in projects • how team members were managed throughout projects with respect to quality within the project • how quality was managed throughout projects • how problems and issues with respect to quality and arising during projects were identified and addressed • how projects were reviewed with respect to quality management • how improvements to quality management of projects have been acted upon
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • the principles of project quality management and their application • acceptance of responsibilities for project quality management • use of quality management systems and standards • the place of quality management in the context of the project life cycle • appropriate project quality management methodologies; and their capabilities, limitations, applicability and contribution to project outcomes • attributes: <ul style="list-style-type: none"> ➤ analytical ➤ attention to detail ➤ able to maintain an overview ➤ communicative ➤ positive leadership
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities • project management • quality management • planning and organizing • communication and negotiation • problem-solving • leadership and personnel management • monitoring and review skills
Resources implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in simulated setting.</p>

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Facilitate and Capitalize on Change and Innovation
Unit Code	AGR FME5 15 0714
Unit Descriptor	This unit specifies the outcomes required to plan and manage the introduction and facilitation of change; particular emphasis is on the development of creative and flexible approaches, and on managing emerging opportunities and challenges.

Elements	Performance Criteria
1. Participate in planning the introduction and facilitation of change	<p>1.1 Manager contribution is made effectively to the organization's planning processes to introduce and facilitate change.</p> <p>1.2 Plans are made to introduce change in consultation with appropriate stakeholders.</p> <p>1.3 Organization's objectives and plans are communicated effectively to introduce change to individuals and teams.</p>
2. Develop creative and flexible approaches and solutions	<p>2.1 Variety of approaches are identified and analyzed to manage workplace issues and problems .</p> <p>2.2 Risks are identified and assessed, and action initiated to manage these to achieve a recognized benefit or advantage to the organization.</p> <p>2.3 Workplace is managed in a way which promotes the development of innovative approaches and outcomes.</p> <p>2.4 Creative and responsive approaches to resource management are used to improve productivity and services, and/or reduce costs.</p>
3. Manage emerging challenges and opportunities	<p>3.1 Individuals and teams are supported to respond effectively and efficiently to changes in the organization's goals, plans and priorities.</p> <p>3.2 Coaching and mentoring are made to assist individuals and teams to develop competencies to handle change efficiently and effectively.</p> <p>3.3 Opportunities are identified and taken as appropriate to make adjustments and respond to the changing needs of customers and the organization.</p> <p>3.4 Information needs of individuals and teams are anticipated and facilitated as part of change implementation and management.</p> <p>3.5 Recommendations are identified, evaluated and negotiated for improving the methods and techniques to manage change with appropriate individuals and groups.</p>

Variables	Range
Manager	a person with frontline management roles and responsibilities, regardless of the title of their position
Appropriate stakeholders	May include but not limited to: <ul style="list-style-type: none"> • organization directors and other relevant managers • teams and individual employees who are both directly and indirectly involved in the proposed change • union/employee representatives or groups • OHS committees • other people with specialist responsibilities • external stakeholders where appropriate - such as clients, suppliers, industry associations, regulatory and licensing agencies
Risks	May include but not limited to: <ul style="list-style-type: none"> • any event, process or action that may result in goals and objectives of the organization not being met • any adverse impact on individuals or the organization • various risks identified in a risk management process
Information needs	May include but not limited to: <ul style="list-style-type: none"> • new and emerging workplace issues • implications for current work roles and practices including training and development • changes relative to workplace legislation, such as OHS, workplace data such as productivity, inputs/outputs and future projections • planning documents • reports • market trend data • scenario plans • customer/competitor data

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> • Planning the introduction and facilitation of change • Developing creative and flexible approaches and solutions • Managing emerging challenges and opportunities
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • Relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety and environmental issues, equal opportunity, industrial relations and anti-discrimination • the principles and techniques involved in: <ul style="list-style-type: none"> • change and innovation management • development of strategies and procedures to implement and facilitate change and innovation • use of risk management strategies: identifying hazards, • assessing risks and implementing risk control measures • problem identification and resolution • leadership and mentoring techniques

	<ul style="list-style-type: none"> • management of quality customer service delivery • consultation and communication techniques • record keeping and management methods • the sources of change and how they impact • factors which lead/cause resistance to change • approaches to managing workplace issues
Underpinning Skills	<p>Demonstrate skills on:</p> <ul style="list-style-type: none"> • Communication skills • Planning work • Managing risk
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Establish and Conduct Business Relationships
Unit Code	AGR FME5 16 0714
Unit Descriptor	This unit covers the skills, attitudes and knowledge required to manage business relationship with customers.

Elements	Performance Criteria
1. Establish contact with customer	<p>1.1 Welcoming customer environment is maintained.</p> <p>1.2 Customer is greeted warmly according to enterprise policies and procedures.</p> <p>1.3 Effective service environment is created through verbal and non-verbal presentation according to enterprise policies and procedures.</p> <p>1.4 Customer data is maintained to ensure database relevance and currency.</p> <p>1.5 Information on customers and service history is gathered for analysis.</p> <p>1.6 Opportunities are identified and taken up to maintain regular contact with customers.</p>
2. Clarify needs of customer	<p>2.1 Customer needs are determined through questioning and active listening.</p> <p>2.2 Customer needs are accurately assessed against the products/services of the enterprise.</p> <p>2.3 Customer details are documented clearly and accurately in required format.</p> <p>2.4 Negotiations are conducted in a business-like and professional manner.</p> <p>2.5 Benefits are maximized for all parties in the negotiation through use of established negotiation techniques and in the context of establishing long term relationships.</p> <p>2.6 The results of negotiations are communicated to appropriate colleagues and stakeholders within appropriate timeframes.</p>
3. Provide information and advice	<p>3.1 Features and benefits of products/services provided by the enterprise are described / recommended to meet customer needs.</p> <p>3.2 Information is provided to satisfy customer needs.</p> <p>3.3 Alternative sources of information/advice are discussed with the customer.</p>
4. Foster and maintain business relationships	<p>4.1 Information needed is pro-actively sought, reviewed and acted upon to maintain sound business relationships.</p> <p>4.2 Agreements are honored within the scope of individual responsibility.</p>

	<p>4.3 Adjustments to agreements are made in consultation with the customer and share information with appropriate colleagues.</p> <p>4.4 Relationships are nurtured through regular contact and use of effective interpersonal and communication styles.</p>
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Variables	Range
Opportunities to maintain regular contact with customers	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • informal social occasions • industry functions • association membership • co-operative promotions • program of regular telephone contact
Negotiation techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • identification of goals, limits • clarification of needs of all parties • identifying points of agreement and points of difference • preparatory research of facts • active listening and questioning • non-verbal communication techniques • appropriate language • bargaining • developing options • confirming agreements and appropriate cultural behavior

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • consistently applying enterprise policies and procedures and industry codes of practice in regard to customer service • providing a quality service environment by treating customers in a courteous and professional manner through all stages of the procedure • using effective questioning/active listening and observation skills to identify customer needs • communicating effectively with others involved in or affected by the work • maintaining relevant and current customer databases in accordance with enterprise policies and procedures • ability to build and maintain relationships to achieve successful business outcomes
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Operational knowledge of enterprise policies and procedures in regard to: <ul style="list-style-type: none"> ➤ customer service ➤ dealing with difficult customers ➤ maintenance of customer databases ➤ allocated duties/responsibilities ➤ General knowledge of the range of enterprise merchandise and services, location of telephone extensions and departments/sections

	<ul style="list-style-type: none"> • Basic operational knowledge of legislation and statutory requirements, including consumer law, trade practices and fair trading legislation • Basic operational knowledge of industry/workplace codes of practice in relation to customer service • negotiation and communication techniques appropriate to negotiations that may be of significant commercial value
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Use workplace technology related to use of customer database • Collect, organize and understand information related to collating and analysing customer information to identify needs • Communicate ideas and information • Plan and organize activities concerning information for database entries • Use mathematical ideas and techniques to plan database cells and size • Establish diagnostic processes which identify and recommend improvements to customer service
Resources implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Farm Machinery and Equipment Operation Level V	
Unit Title	Manage Continuous Improvement Process (Kaizen)
Unit Code	AGR FME5 17 0714
Unit Descriptor	This unit describes the performance, outcomes, knowledge, attitude and skills required to sustain and develop an environment in which continuous improvement, innovation and learning are promoted, rewarded and managed.

Elements	Performance criteria
1. Diagnose the current status.	1.1 Parameters used for study current situation are obtained. 1.2 Internal and external environment is analyzed. 1.3 Problems related to targeted environment is recognized and identified. 1.4 Problems regarding to current situation are analyzed. 1.5 Alternatives are generated. 1.6 Best alternatives are selected.
2. Design an effective continuous improvement process (kaizen).	2.1 The values, mission and goals of kaizen management system are clarified. 2.2 The kaizen management template and a visual management logo full of purpose and meaning are developed. 2.3 A clear action strategy (master and detailed plans) is defined. 2.4 The most effective and proven kaizen tools are chosen and applied. 2.5 A practical way is identified to involve all employees in Gemba activities (top, middle and bottom).
3. Develop change capability.	3. 1. Kaizen Promotion Team Structure is developed. 3. 2. The Kaizen Training Plan is defined and started. 3. 3. Supervisors' kaizen capability and habits are developed. 3. 4. Key people are developed in terms of Individual leadership capability .
4. Implement improved processes.	4.1 Sustainability/continuous improvement are promoted as an essential part of doing business. 4.2 Impacts of change and consequences are addressed for people, and transition plans implemented. 4.3 Objectives, time frames, measures and communication plans are ensured in place to manage implementation. 4.4 Contingency plans are implemented in the event of non-performance.

	<p>4.5 Failure is followed-up by prompt investigation and analysis of causes.</p> <p>4.6 Emerging challenges and opportunities are managed effectively.</p> <p>4.7 Continuous improvement systems and processes are evaluated regularly.</p> <p>4.8 Improvements are communicated to all relevant groups and individuals.</p> <p>4.9 Opportunities are explored for further development of value stream improvement processes.</p>
5. Establish direction and control.	<p>5.1 A system audit tool is defined and implemented.</p> <p>5.2 The kaizen management system is deployed across all company levels and functions.</p> <p>5.3 Results are checked and corrections made.</p> <p>5.4 Standard operating procedures are developed and maintained.</p> <p>5.5 The recruit, training and evaluation systems are improved and HR practices compensated.</p>

Range	Variables
Parameters	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Working condition • Resources may include: <ul style="list-style-type: none"> ➢ Human ➢ Material ➢ Machine • Kaizen elements
Kaizen management template	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Visual management board for: <ul style="list-style-type: none"> ➢ displaying characteristic figures, data and graphics ➢ depicting and controlling processes ➢ identifying and marking sources of risks, setting and standards ➢ displaying company's values and goals of kaizen
Kaizen tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S (a visual workplace management) • 7 QC tools(Cause and Effect Diagram, Check Sheet , Pareto Diagram , Histogram, Scatter Diagram, Control Chart and Flow Chart) • Brainstorming • Basic Industrial Engineering (IE) tools such as time study, motion study, line balancing, work sampling • JIT(JUST IN TIME principles) • MUDA identification and elimination tools • Kanban • Poka-yoke • Takt- time

Gemba activities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Value-adding activities to satisfy the customer • Employee autonomous operations (participating in team to identify nonconformity, propose solutions and implement them autonomously)
Individual leadership capability	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Personal and interpersonal skills • Courage • Honour and integrity • Energy and drive • Strategic skills • Operating skills • Organizational positioning skills
Sustainability/continuous improvement	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Improvements made by following PDCA (Plan, Do, Check and Act) cycle for: <ul style="list-style-type: none"> ➢ Improvements in one's own work ➢ Saving in energy, material and other resources ➢ Improvements in the working environment ➢ Improvements in machines and processes ➢ Improvements in jigs and tools ➢ Improvement in office work ➢ Improvements in product quality ➢ Ideas for new products ➢ Customers services and customer relations
System audit tool	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S audit • Patrol system • Kaizen board • 5M check lists • Key Performance Indicators (KPIs)
Standard operating procedure	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Administrative standards for: <ul style="list-style-type: none"> ➢ Managing the business ➢ Administration ➢ Personnel Guidelines ➢ Job Descriptions ➢ Guidelines for preparing cost information • Operation standards for: <ul style="list-style-type: none"> ➢ Describing the way a job is done. ➢ Help realising Quality, cost, delivery. ➢ Addressing the need to satisfy customers. ➢ Using the process that's the best. ➢ Producing work in the most cost effective manner. ➢ Assuring total quality for the customer.
HR practices	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Resources may include: <ul style="list-style-type: none"> ➢ Recruit and retain high quality people with innovative skills and a good track, record in innovation • HR development is used for: <ul style="list-style-type: none"> ➢ strategic capability and provide encouragement and

	<p>facilities for enhancing innovating skills and enhancing the intellectual capital of the organization</p> <ul style="list-style-type: none"> • Reward will: <ul style="list-style-type: none"> ➤ Provide financial incentives and rewards and recognition for successful innovation
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Evidence Guide	
Critical Aspects of Assessment	<p>Demonstrates skills and knowledge competencies to:</p> <ul style="list-style-type: none"> • Establish policy and cross-functional goals for kaizen • Deploy and implement goals as directed through policy deployment and cross-functional management. • Realize goals through deployment and audits. • Build systems, procedures, and structures conducive to kaizen. • Use kaizen in functional capabilities. • Introduce Kaizen as a corporate strategy • Provide support and direction between allocating resources • Establish, maintain and upgrade standards. • Make employees conscious through training programs. • Assist employees develop skills and tools for problem solving.
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Quality management and continuous improvement theories • creativity/innovation theories/concepts • competitive systems and practices tools, including: <ul style="list-style-type: none"> ➤ 5S ➤ JUST IN Time (JIT) ➤ mistake proofing ➤ process mapping ➤ establishing customer pull ➤ setting of KPIs/metrics ➤ SOP ➤ Kaizen elements/targets. ➤ identification and elimination of waste/MUDA ➤ continuous improvement processes including implementation, monitoring and evaluation strategies for a whole organization and its value stream ➤ Difference between breakthrough improvement and continuous improvement ➤ organizational goals, processes and structure ➤ approval processes within organization ➤ methods of determining the impact of a change ➤ customer perception of value ➤ Define, Measure, Analyze, Improve and Control (DMAIC) to sustain process
Underpinning Skills	<p>Demonstrates Skills to:</p> <ul style="list-style-type: none"> • Use leadership skills to foster a commitment to quality and openness to improvement. • Analyze training needs and implementing training programs • Prepare and maintain quality and audit documentation • Undertake self-directed problem solving and decision-making

	<p>on issues of a broad and/or highly specialized nature and in highly varied and/or highly specialized contexts</p> <ul style="list-style-type: none"> • Communicate at all levels in the organization and to audiences of different levels of literacy and numeracy • Analyze current state/situation of the organization. • Analyze individually and collectively the implementation of competitive systems and practices tools in the organization and determining strategies for improved implementation • Solve highly varied and highly specialized problems related to competitive systems and practices implementation and continuous improvement to root cause • Negotiate with stakeholders, where required, to obtain information required for implementation and refinement of continuous improvements, including management, unions, employees and members of the community. • Review relevant metrics, including all those measures which might be used to determine the performance of the improvement system, including: <ul style="list-style-type: none"> ➢ Key Performance Indicators (KPIs) for existing processes ➢ Quality statistics ➢ Delivery timing and quantity statistics ➢ Process/equipment reliability ('uptime')
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

FARM MACHINERY AND EQUIPMENT OPERATION

