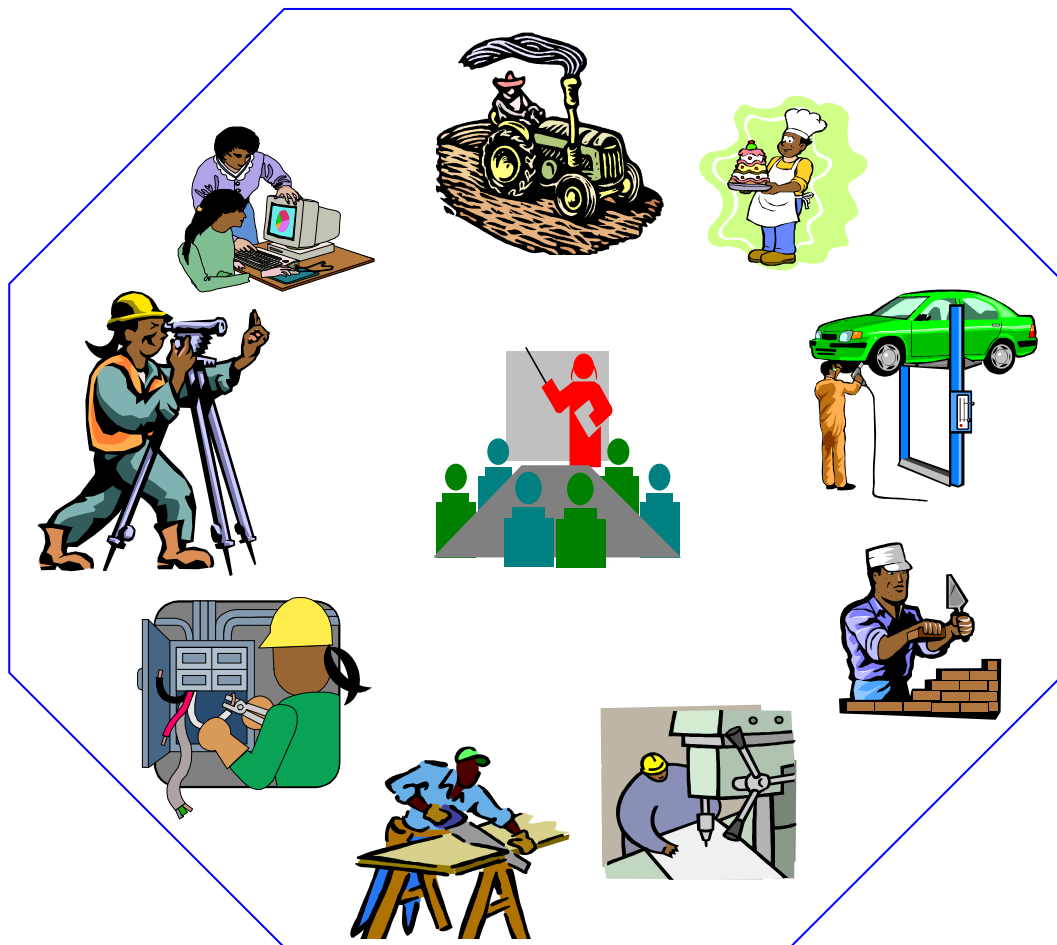




Federal Democratic Republic of Ethiopia
OCCUPATIONAL STANDARD

BASIC RUBBER TREE PLANTATION & NATURAL RESOURCE CONSERVATION

NTQF Level I



*Ministry of Education
June 2016*

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 labor market.

The Ethiopian 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 Title 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
- Evidence guide

Together all the parts of a Unit Title 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 Title:

- 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 Title(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

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UNIT OF COMPETENCE CHART

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation		
Occupational Code: IND RTN1		
<i>NTQF Level I</i>		
IND RTN1 01 0616 Support Rubber Tree Farm Works	IND RTN1 02 0616 Support Rubber Tree Nursery Work	IND RTN1 03 0616 Perform Basic Measurements and Calculations
IND RTN1 04 0616 Operate Basic Machinery and Equipment	IND RTN1 05 0616 Support Rubber Tree Plantation Work	IND RTN1 06 0616 Provide Basic First Aid
IND RTN1 07 0616 Support Irrigation Works	IND RTN1 08 0616 Support Natural Area Conservation Works	IND RTN1 09 0616 Support Organic Fertilizers Preparation
IND RTN1 10 0616 Support Latex Collection and Preservation	IND RTN1 11 0616 Follow Basic Chemical Safety Rules	IND RTN1 12 0616 Collect and Process Seed
IND RTN1 13 0616 Operate a Personal Computer	IND RTN1 14 0616 Apply Quality Standards	IND RTN1 15 0616 Work with Others
IND RTN1 16 0616 Receive and Respond to Workplace Communication	IND RTN1 17 0616 Demonstrate Work Values	IND RTN1 18 0616 Develop Understanding of Entrepreneurship
IND RTN1 19 0616 Apply 3S		

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Support Rubber Tree Farm Works
Unit Code	IND RTN1 01 0616
Unit Descriptor	This competence standard covers the process of supporting rubber tree farm work under supervision. It requires the ability to prepare materials; tools and equipment for rubber tree farm work, undertake rubber tree farm activities, handle materials and equipment, and clean up on completion of work. Supporting rubber tree farm work requires knowledge of safe work practices, rubber tree farm work practices and related tools and equipments.

Elements	Performance Criteria
1. Prepare materials, tools and equipment for rubber tree farm work	<p>1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.</p> <p>1.2 Checks are conducted on all materials, tools and equipment with insufficient or faulty items reported to the supervisor.</p> <p>1.3 Techniques used when loading and unloading materials demonstrate correct manual handling and minimize damage to the load and the vehicle.</p> <p>1.4 Suitable Personal Protective Equipment (PPE) is selected and checked prior to use.</p> <p>1.5 Rubber tree farm support is provided according to OHS requirements and according to workplace information.</p> <p>1.6 OHS hazards are identified and reported to the supervisor.</p>
2. Undertake rubber tree farm work as directed	<p>2.1 Instructions and directions provided by supervisor are followed and clarification sought when necessary.</p> <p>2.2 Rubber tree farm work is undertaken in a safe and environmentally appropriate manner according to enterprise guidelines.</p> <p>2.3 Interactions with other staff and customers are carried out in a positive and professional manner.</p> <p>2.4 Enterprise policy and procedures in relation to workplace practices, handling and disposal of materials is observed.</p> <p>2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.</p>

3. Handle materials and equipment	<p>3.1 Waste materials produced during rubber tree farm work are stored in a designated area according to supervisor's instructions.</p> <p>3.2 Materials, equipment and machinery are handled and transported according to supervisor's instructions and enterprise guidelines.</p> <p>3.3 A clean and safe work site is maintained while completing rubber tree farm work activities.</p>
4. Clean up on completion of rubber tree farm work	<p>4.1 Materials are returned to store or disposed of according to supervisor's instructions.</p> <p>4.2 Tools and equipment are cleaned, maintained and stored according to manufacturer's specifications and supervisors' instructions.</p> <p>4.3 Work outcomes are reported to the supervisor.</p>

Variable	Range
Tools and equipment	May include: <ul style="list-style-type: none"> • Tapping knives, hand tools, rope, sack trucks, fencing tools, augers, knapsack, measuring tap, PPE, latex materials(cup, spout, cup hanger, graduate cylinder, filter, rain guard) and brooms
Instructions	May include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs), enterprise policy and procedures, specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturer's instructions, or verbal directions from manager or supervisor.
PPE	May include: <ul style="list-style-type: none"> • steel capped boots/shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, rain coat, face mask and ear protectors
Workplace information	May include procedures for disposing of waste materials, work instructions or verbal instructions from the supervisor.
OHS hazards	May include: <ul style="list-style-type: none"> • solar radiation, dust, noise, air- and soil-borne micro organisms, chemicals and hazardous substances, sharp hand tools and equipment, manual handling, holes, danger animals and slippery and uneven surfaces
Waste materials	May include: <ul style="list-style-type: none"> • Plant debris, litter and broken components, plastic, metal, or paper-based materials. These may be recycled, re-used, returned to the manufacturer or disposed of according to enterprise work procedures.

Rubber tree farm work	<p>May include:</p> <ul style="list-style-type: none"> • Assistance with all activities associated with rubber tree farm working such as land preparation, planting, fertilizing, harvesting, baling, raking, loading and unloading or other relevant duties. • Removing weeds (rouging) or rocks from rubber tree or fields, and routine maintenance of sheds and other workplaces.
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Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • safe work practices in repair and maintenance of structures • prepare materials, tools and equipment for rubber tree farm work • undertake work as directed • handle materials and equipment • cleanup on completion of work • collect and organize information, locate, interpret and apply with further clarification • use mathematical ideas and skills in counting, tallying and estimation
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • safe work practices • repair and maintenance of structures • preparing materials, tools and equipment for rubber tree farm work • undertaking work as directed • handling materials and equipment • cleaning up on completion of work • using mathematical ideas and skills in counting, tallying and estimation
Underpinning Skills	<p>include the ability to:</p> <ul style="list-style-type: none"> • prepare materials, tools and equipment for rubber tree farm work • undertake work as directed • handle materials and equipment • clean up on completion of work • communicate ideas and information about the job, tasks and problems • collect and organize information, locate, interpret and apply with further clarification • working with others and in teams • use mathematical ideas and skills in counting, tallying and estimation

	<ul style="list-style-type: none"> • apply technology in the use of farm tools and equipment
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • access is required to real or appropriately simulated situations, including work areas, materials and equipment • documentation and information on workplace practices and OHS practices • specifications and work instructions
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • questioning or interview on underpinning knowledge • project-related conditions (real or simulated) and require evidence of process
Context of Assessment	<p>Competency may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Agricultural Operation and Natural Resources Conservation Level I	
Unit Title	Support Rubber Tree Nursery Work
Unit Code	IND RTN1 02 0616
Unit Descriptor	This competency standard covers the process of supporting work carried out in wholesale or retail nurseries while under supervision. It requires the ability to prepare materials, tools and equipment for nursery work, undertake nursery work activities, store and stockpile materials, and clean up on completion of work. Supporting nursery work requires knowledge of safe work practices, nursery hygiene and quality control, nursery plant maintenance activities, basic stock control procedures, and propagation techniques.

Elements	Performance Criteria
1. Prepare materials, tools and equipment for nursery work	<p>1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.</p> <p>1.2 Checks are conducted on all materials, tools and equipment, with insufficient or faulty items reported to the supervisor.</p> <p>1.3 Techniques used when loading and unloading materials demonstrate correct manual handling, and minimize damage to the load and the vehicle.</p> <p>1.4 Suitable Personal Protective Equipment (PPE) is selected and checked prior to use.</p> <p>1.5 Nursery support is provided according to OHS requirements and workplace information.</p> <p>1.6 OHS hazards are identified and reported to the supervisor.</p>
2. Undertake nursery work as directed	<p>2.1 Instructions and directions provided by supervisor are followed, and clarification sought when necessary.</p> <p>2.2 Nursery work is undertaken in a safe and environmentally appropriate manner according to nursery guidelines.</p> <p>2.3 Interactions with other staff and customers are carried out in a positive and professional manner.</p> <p>2.4 Nursery policy, procedures and OHS requirements in relation to workplace hygiene practices, handling and disposal of materials is observed.</p>

	2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.
3. Store and stockpile materials	<p>3.1 Plant debris and waste material produced during nursery activities are stored according to supervisors' instructions.</p> <p>3.2 Plant debris and waste materials are prepared and processed in an appropriate and safe manner according to supervisor's instructions.</p> <p>3.3 Surplus materials are stockpiled for removal according to supervisor's instructions.</p> <p>3.4 A clean and safe work site is maintained while completing nursery activities.</p>
4. Clean up on completion of nursery work	<p>4.1 Plants and materials are stored according to supervisor's instructions and OHS requirements.</p> <p>4.2 Tools and equipment are cleaned, maintained and stored according to manufacturer's specifications and supervisor's instructions.</p> <p>4.3 Work outcomes are reported to the supervisor.</p>

Variable	Range
Tools and equipment	<p>May include:</p> <ul style="list-style-type: none"> • Manual or electronic ticketing/labeling equipment, wheelbarrows, trolleys, motorized trolleys, scissors, cleaning equipment, secateurs, knives, media trays, hand tools, water pump, water spray container, dibblers, cutter, and rubbish bins.
Instructions	<p>May include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs), company policy and procedures in regard to product merchandising and displays, specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturer's instructions, product labels, or verbal directions from manager, supervisor, or senior operator.
PPE	<p>May include:</p> <ul style="list-style-type: none"> • Personal protective clothing and equipment steel capped boots/ shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, face mask, rain coat and ear protectors.
Workplace information	<p>May include:</p> <ul style="list-style-type: none"> • Procedures for disposing of waste materials, work instructions or verbal instructions from the supervisor, OHS legislative requirements and relevant Codes of Practice.

OHS hazards	<p>May include:</p> <ul style="list-style-type: none"> • heavy materials and equipment, slippery or uneven surfaces, moving machinery and vehicles, solar radiation, and potential dangers from handling potting media, fertilizers, watering systems, flood, wild animals and spider and insect bites.
Hygiene practices	<p>May include disinfestations and storage of planting media, disinfestations of contaminated plants and materials, hand washing, footbaths, anti sing/ sterilizing tools, equipment and benching, access restrictions, and handling practices which minimize cross contamination.</p>
Waste	<p>May include prompt removal and/or disinfestations of organic waste, use of mixing site, neutralizing pits for disposal of chemicals and cleaning products, recycling seed trays, poly trays, bags, and recycling waste water or disposing using approved discharge system.</p>
Tasks	<p>May include:</p> <ul style="list-style-type: none"> • Assisting with the display of nursery products (e.g., plant, goods and supplies) including unpacking, placing where directed, replenishing as required, preparing and placing price tickets, labels and other display materials. • Provide nursery plant care including watering, weeding, removing dead materials, staking, trimming, and potting on of plants as directed. • Load and unload nursery stock including preparing stock for dispatch, and checking stock on receipt or at dispatch against documentation. • Supporting propagation activities including assisting with preparing planting media, collecting propagating materials, and blocking up plants in correct patterns and spacing.

Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • Prepare materials, tools and equipment for nursery work. • Undertake nursery work as directed. • Store and stockpile materials. • Clean up on completion of nursery work. • Perform nursery plant maintenance activities. • Basic stock control procedures. • Apply Propagation techniques. • Communicate ideas and information about the job, tasks and problems with other members in the work team and the supervisor.

Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge and understanding of:</p> <ul style="list-style-type: none"> • Safe work practices. • Nursery hygiene and quality control. • Nursery plant maintenance activities. • Basic stock control procedures. • Propagation techniques. • OHS legislative requirements and Codes of Practice.
Underpinning Skills	<p>Demonstrate skills in:</p> <ul style="list-style-type: none"> • Prepare materials, tools and equipment for nursery work. • Undertake nursery work as directed. • Store and stockpile materials. • Clean up on completion of nursery work. • Communicate ideas and information about the job, tasks and problems with other members in the work team and the supervisor. • Collect and organize information and, interpret and apply with further clarification. • Work with others and in teams and co-operate with other staff in completing nursery tasks. • Use mathematical skills and techniques in counting, tallying and estimation when handling plants or other nursery materials. • Apply technology in the use of nursery equipment and communication systems.
Resources Implication	<p>The following resources must be provided.</p> <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • Specifications and work instructions
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Written exam/test on underpinning knowledge • questioning or interview on underpinning knowledge • project-related conditions (real or simulated) and require evidence of process <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competency may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Perform Basic Measurements and Calculations
Unit Code	IND RTN1 03 0616
Unit Descriptor	This unit covers the knowledge, skills, and attitude required to carry out measurements and perform simple calculations to determine task and material requirements for a job in an agricultural work environment.

Elements	Performance Criteria
1. Plan and prepare	<p>1.1 Work instructions are confirmed and applied.</p> <p>1.2 Safety requirements are obtained from the site safety plan, other regulatory Working drawings or legal obligations and applied.</p> <p>1.3 Measuring and calculating tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability.</p>
2. Obtain measurements	<p>2.1 Method of obtaining the measurement is selected and applied.</p> <p>2.2 Measurements are obtained using measurement tools.</p> <p>2.3 Measurements are confirmed and recorded.</p>
3. Perform calculations	<p>3.1 Appropriate calculation method is selected for achieving the required result.</p> <p>3.2 Material quantities for the project are correctly calculated using the appropriate factors.</p> <p>3.3 Results are confirmed and recorded.</p>
4. Estimate approximate quantities	<p>4.1 Calculations are taken for determining material quality requirements.</p> <p>4.2 Appropriate formulas for calculating quantities are selected.</p> <p>4.3 Quantities are estimated from the calculations taken.</p> <p>4.4 Material quantities for the project are calculated, confirmed and recorded within enterprise tolerances.</p>

Variable	Range
Safety requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> OHS requirements are to be in accordance with Federal legislation and regulations organizational safety policies and procedures, and project safety plan:

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	<ul style="list-style-type: none"> ➤ protective clothing and equipment ➤ use of tools and equipment ➤ workplace environment and safety ➤ handling of materials ➤ use of firefighting 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 ➤ emergency procedures related to equipment operation are to include but may not be limited to emergency shutdown and stopping, extinguishing equipment fires, organizational first aid requirements and evacuation
Tools and equipment	<p>May include:</p> <ul style="list-style-type: none"> • rulers • tape measures • trundle wheels • calculators • laser • GPS • Weight balance • Tally counter
Requirements	<p>May include:</p> <ul style="list-style-type: none"> • organizational/project environmental management plan waste management, water quality protection • noise vibration • dust and clean-up management
Quality Requirements	<p>May include:</p> <ul style="list-style-type: none"> • dimensions • tolerances • standards of work and material standards as detailed in the project drawings • working drawings and project documentation to meet client satisfaction
Communications	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • verbal instructions • two way radio • hand signals • mobile phone • phone • facsimile • computer • site specific instructions

	<ul style="list-style-type: none"> • written instructions or instructions related to job/task
Information	<p>May include but not be limited to:</p> <ul style="list-style-type: none"> • verbal or written and graphical instructions • sign age • plans • work bulletins • charts and hand drawings • memos • maps • Material Safety Data Sheets (MSDS) • diagrams or sketches and graphics • Safe work procedures or equivalent Regulatory/legislative requirements • manufacturers' Working drawings and instructions • Organization's work Working drawings and requirements • Instructions issued by authorized organizational or external personnel • relevant Ethiopian Standards

Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • locate, interpret and apply relevant information • comply with site safety plan, ohs regulations and legislation applicable to workplace operations • comply with organizational policies and procedures including quality requirements • safe and effective operational use of tools and equipment • communicate and working effectively and safely with others • complete of measurements, calculations and determination of quantities for at least three different projects of varying complexity • calculate each of the following using a realistic task for example: <ul style="list-style-type: none"> ➤ length ➤ perimeter ➤ circumference ➤ area ➤ volume ➤ number ➤ ratio and percentage • conversion of meters to millimeters and millimeters to meters • measure using a rule or tape measure five separate tasks within 1mm accuracy

Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> • site and equipment safety requirements • Measuring, calculating, geometry and determination of quantities • Tolerances • Calculators • Company procedures • Project quality requirements • Communication devices • Processes for care of measuring equipment • agricultural terminology
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> • apply measuring, calculating, geometry and determination of quantities • apply project quality requirements • apply OHS practice • use measuring and calculating devices
Resources Implication	The following resources must be provided. <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • specifications and work instructions
Assessment Methods	Competence may be assessed through: <ul style="list-style-type: none"> • Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
Context of Assessment	Competency may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Operate Basic Machinery and Equipment
Unit Code	IND RTN1 04 0616
Unit Descriptor	This competency standard covers the use and maintenance of basic machinery and equipment. Competency requires the application of skills and knowledge to a limited range of tasks including pre-operational checks, and the cleaning and storage of tools and equipment. In addition, competency requires an awareness of workplace safety and positive environmental practices associated with equipment operation. The work in this standard is likely to be under direct supervision with regular checking.

Elements	Performance Criteria
1. Prepare basic machinery and equipment for use	<p>1.1 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 hazards in the workplace are identified and reported to the supervisor.</p>
2. Operate basic machinery and equipment	<p>2.1 Suitable personal protective clothing and equipment is selected, used, maintained and stored in accordance with Occupational Health and Safety requirements.</p> <p>2.2 Machinery and equipment are operated to manufacturers specifications and in accordance with supervisor's instructions.</p> <p>2.3 Work is completed to supervisor's satisfaction and in accordance with Occupational Health and Safety requirements.</p> <p>2.4 Environmental implications associated with operation and maintenance are identified and reported verbally to the supervisor.</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 manufacturers specifications and supervisors 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 Occupational Health and Safety and enterprise requirements.</p>
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Variable	Range
Machinery and equipment	<p>May include:</p> <ul style="list-style-type: none"> • small engine machinery such as: <ul style="list-style-type: none"> ➤ mowers ➤ brush cutters ➤ pumps ➤ Gurneys ➤ air compressors ➤ generators • equipment such as: <ul style="list-style-type: none"> ➤ hand tools ➤ wheelbarrows ➤ spades ➤ shovels and forks ➤ this unit excludes ➤ ride-on machinery ➤ electrically powered tools ➤ vehicles ➤ chainsaws ➤ Roller ➤ Mixer
Pre-operational checks	<p>May include:</p> <ul style="list-style-type: none"> • fuels, fuel lines and oils • battery electrolyte levels, wheels and tyre pressure • air filters • safety guards • preparation on equipment may include • cleaning, lubricating • identifying and segregating unsafe or faulty equipment for repair or replacement
Enterprise requirements	<p>May include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs), industry standards, • production schedules, Material Safety Data Sheets (MSDSs), • work notes, product labels, manufacturers specifications, • operators manuals, enterprise policies and procedures

	<ul style="list-style-type: none"> • (including waste disposal, recycling and re-use guidelines), • Occupational Health and Safety procedures, supervisors oral or written instructions, work and routine maintenance plans could be included in enterprise requirements
Occupational Health and Safety hazards	<p>May include:</p> <ul style="list-style-type: none"> • exposure to loud noise and fumes, solar radiation, latex allergy, dust • ergonomic hazards associated with posture and vibration • hazardous substances (fuels, oils, fertilizer, chemicals), oil and grease spills • the presence of bystanders, livestock and wildlife • uneven and varying terrain gradients, potholes, ditches, gullies, embankments, obstacles • rocks • logs • fences • débris • buildings • extreme weather conditions, electricity, overhead hazards such as: <ul style="list-style-type: none"> ➤ power lines mechanical malfunctions ➤ exposed moving parts ➤ other machinery including hydraulics
Personal protective clothing and equipment	<p>May include:</p> <ul style="list-style-type: none"> • safety shoes/boots • hat/hard hat • overalls • gloves • protective eyewear • hearing protection] • safety harness • respirator or face mask • sun protection, e.g., sun hat, sunscreen and rain coat
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), hazardous substances (fuel, fertilizer), and damage to fauna and flora in natural areas • impacts may also include run-off flows of water and cleaning agents from servicing, maintenance and cleaning activities, soil disturbance and dust problems from high activity traffic (including irrigation equipment)

Sport and recreation industry	<ul style="list-style-type: none"> • industry sectors of community recreation, fitness, outdoor recreation and sport • significant roles played by activity organizations, industry peak bodies, professional organizations • large volunteer base • high turnover of volunteers • high levels of part time and casual employment • irregular working hours • relatively few professional positions • workforce employed mostly in operational positions • mainly small business or self-employed personnel • slow to take up technology • over 2/3 of the sport and recreation industry have no: <ul style="list-style-type: none"> ➢ formal/recognized qualifications ➢ significant reliance upon industry credentials and involvement in the activity itself
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Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • operate of basic machinery and equipment • select, maintain and utilize a range of machinery and equipment to complete designated work tasks • carry out pre-operational checks • recognize and report equipment faults and workplace hazards • interpret and follow instructions • maintain equipment usage records • clean, secure and store equipment after use • demonstrate a safe workplace and environmentally responsible practices
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Pre-operational and safety checks for basic machinery and equipment • 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 regulations and Codes of Practice with regard to workplace Occupational Health and Safety

	<p>requirements, and the use and control of hazardous substances</p> <ul style="list-style-type: none"> • Environmental impacts and minimization 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>Demonstrates skills to:</p> <ul style="list-style-type: none"> • use Personal protective clothing and equipment and when and how it should be used, maintained and stored • Communicating ideas and information with regard to basic machinery and equipment operation, safety procedures and their application • Collect information regard to the performance of machinery, equipment, identified faults, and Occupational Health and Safety concerns may be reported for repair and organized by records • Working with others and in teams in methods and procedures to complete maintenance and job functions to achieve work plan requirements • Using mathematical ideas and techniques in the calculation and measurement of volumes, weights and consumption, particularly in relation to pre-operational checks • Solving problems on Machinery and equipment breakdowns, faults or malfunctions • Use technology to communicate, measure and record information with regard to machinery and equipment maintenance, usage and performance
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • Specifications and work instructions
Methods of Assessment	<p>Competence may be assess through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Questioning/ Interview/ Written exam/test on underpinning knowledge
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Support Rubber Tree Plantation Work
Unit Code	IND RTN1 05 0616
Unit Descriptor	This competence standard covers the process of providing ground support to rubber tree plantation work unit. Support requires checking tools and equipment, maintaining a clear work site during operations, communicating with and observing above ground workers, assisting climbers by sending up tools and equipment, and receiving and processing rubber tree pruning. Ground support work is performed under direct supervision within established rubber tree plantation guidelines.

Elements	Performance Criteria
1. Prepare for ground support operations	<p>1.1 Instructions for ground support operations are received and clarified prior to work being undertaken.</p> <p>1.2 OHS hazards are identified.</p> <p>1.3 Tools, equipment and machinery are selected that are appropriate to the task being undertaken.</p> <p>1.4 Pre-operational and safety checks are carried out on tools, equipment and machinery according to manufacturers specifications and enterprise work procedures.</p> <p>1.5 Suitable safety equipment and Personal Protective Equipment (PPE) is selected, checked, used and maintained.</p>
2. Maintain a clear work site during operations	<p>2.1 Persons not involved in the work program are kept away from the site during operations.</p> <p>2.2 Tools, equipment and machinery are stored clear of debris and the drop zone.</p> <p>2.3 Rescue equipment is placed within easy access.</p> <p>2.4 Drop zone is kept free of debris according to enterprise guidelines.</p>
3. Provide ground support for tree climbers	<p>3.1 Communication links between ground crew and operator are clearly maintained at all times according to enterprise guidelines.</p> <p>3.2 Non-verbal signs of communication are received and clarified according to enterprise guidelines.</p>

	<p>3.3 Equipment is raised and lowered to climber using safe working procedures.</p> <p>3.4 Rope handling techniques are performed according to safe working practices.</p>
4. Receive and process tree during operations	<p>4.1 Tools and equipment are used according to supervisors' instructions and manufacturers' guidelines.</p> <p>4.2 Tree pruning is received and stacked according to enterprise guidelines.</p> <p>4.3 Tree pruning is prepared for processing according to enterprise guidelines.</p> <p>4.4 Processing of tree pruning are undertaken according to supervisors' instructions and/or manufacturer's instructions.</p> <p>4.5 Surrounding environment is maintained in a damage free condition.</p>
5. Complete ground support operations	<p>5.1 Tools, equipment and machinery are checked for wear/damage, prepared for transporting/storage, and stored according to enterprise policy and procedures.</p> <p>5.2 Waste material is collected and disposed of, or recycled to minimize damage to the environment.</p> <p>5.3 Records of ground support operations are maintained in the appropriate format.</p>

Variable	Range
Instructions	May include standard Operating Procedures (SOP) or verbal directions from manager, supervisor, or senior operator; work notes, routine maintenance schedules; manufacturers service specifications and operators manuals; waste disposal, recycling and re-use guidelines; and OHS procedures.
OHS hazards	May include OHS hazards may working near power lines, tree integrity, climbing, traffic, manual handling, moving equipment and vehicles, sharp hand tools, falling branches and equipment, UV radiation, heat and cold, fatigue, working alone, noise, insects and animals
Tools , equipment and machinery	May include ropes , safety lines, safety harness, saddle, lanyard, karabiners, rope grabs, pole belts and other climbing gear; chipper; small chainsaw and appropriate maintenance equipment; ladder, handsaw, secateurs, elevating work platform (EWP), and vehicles for loading and removing pruning.

Safety equipment	May include safety equipment pedestrian barriers, traffic barriers, warning signs, road signs, danger signs, flashing lights, traffic bollards, safety mesh, and witches hats.
PPE	May include steel cap boots, six point safety helmet, ear protection, eye protection, cut resistant trousers or chaps, reflective vest, close fitting work clothes, gloves and sunscreen lotion
Rescue equipment	May include first aid kit, emergency contact numbers, harness, lifeline, prussic loop, karabiners, climbing spurs, flip line / pole strap, pulleys and tube tape.
Drop zone	May include the drop zone is calculated by establishing a radius in which tree pruning are expected to fall and adding a safety margin. The drop zone may be marked out by witches hats, signs and barriers.
Non -verbal signs of communication	May include: <ul style="list-style-type: none"> • Hand signals, whistles, and signage.
Safe working practices	May include the use of clove hitch knots when sending up tools and equipment on ropes, double checking ropes for faults, and correct manual handling.
Rope handling techniques	May include keeping climbing ropes clear of saws, falling timber, and ground level obstacles.
Process tree pruning	Processing methods may include chipping, burning, and removal.
Waste material	May include large branches, processed plant debris, broken equipment or components, and litter. Plant-based material may be used as mulch or compost, or recycled as firewood; plastic, metal, paper-based materials may be recycled, re-used, returned to the manufacturer, or disposed of according to enterprise work procedures
Records	May include equipment safety checklist and hours.

Evidence Guide	
Critical Aspects of Competence	A candidate must be able to demonstrate the ability to: <ul style="list-style-type: none"> • support and monitor a climber during tree works, • maintain a safe work site, • Communicate effectively with both climbers and other members of the ground support team. • calculate or estimate fuel levels, exclusion zones, distance, and quantities of tree pruning to be processed
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> • basic operational and maintenance requirements of rubber tree plantation equipment • safety procedures and potential hazards of working in trees

	<ul style="list-style-type: none"> • non-verbal communication protocols and techniques used for tree work • principles and methods of rope handling techniques • The effect of adverse outdoor climatic conditions which may prevent or impede rubber tree plantation operations (steady rain, lightning, excessive heat).
Underpinning Skills	<p>include the ability to:</p> <ul style="list-style-type: none"> • interpret work procedures including hazard and risk analysis and maintenance schedules • participate in teams and contribute to team objectives • monitor and maintain rubber tree plantation tools and equipment • communicate of ideas and information about specific tasks associated with the job, such as work completion and hazards may be communicated to work colleagues and the supervisor • collect and organize information such as site details, tree inspection results, safety issues and work schedules • calculate rope lengths and distances, the area of exclusion and drop zones, fuel volumes, and quantity of tree pruning and processed plant material • prepare, use and maintenance of rubber tree plantation tools and equipment, and communication systems such as two-way radios
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • Specifications and work instructions
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Questioning/ interview /Written exam/test on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Provide Basic First Aid
Unit Code	IND RTN1 06 0616
Unit Descriptor	<p>This competency standard covers the process of providing essential first aid in recognizing and responding to an emergency using basic life support measures. The first aider is not expected to deal with complex casualties or incidents, but to provide an initial response where first aid is required. The first aider will generally be working under supervision.</p> <p>It requires the ability to respond positively to emergencies in line with practiced actions and demonstrate basic first aid casualty management principles. Providing basic first aid requires knowledge of the use of safe working practices, the emergency network, and first aid casualty management principles.</p>

Element	Performance Criteria
1. Assess the situation	<p>1.1 Emergency situations are recognized in the work place area during maladies.</p> <p>1.2 Physical hazards to personal and others health and safety are identified.</p> <p>1.3 Immediate risk to self and casualty's health and safety are minimized by isolating the hazard.</p> <p>1.4 The casualty's physical condition and vital signs are assessed.</p>
2. Apply basic first aid techniques	<p>2.1 Casualty is reassured in a caring and calm manner and made comfortable using available resources.</p> <p>2.2 First aid care is provided in accordance with established first aid procedures.</p> <p>2.3 First aid assistance is sought from others as appropriate.</p>

Variable	Range
Emergency situations	<p>May include:</p> <ul style="list-style-type: none"> • Fire, fuel spillage, formic acid, anhydrous ammonia emergencies and chemical spillage. Emergency situations can also arise due to trauma, e.g., road accidents, snakebite or poisoning, respiratory or cardiac arrest, and electrocution.
Maladies	<p>May include bleeding and shock, burns, fits, choking, heart attack, fractures, poisoning and drowning.</p>

Physical Hazards	<p>May include:</p> <ul style="list-style-type: none"> • Proximity of other people, lack of oxygen, vehicles and machinery, fire, gas, fume and electrical situations.
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Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to know :</p> <ul style="list-style-type: none"> • Describe first aid casualty management techniques • Apply first aid casualty management techniques • apply safe working practices
Underpinning Knowledge	<p>Demonstrate Knowledge of:</p> <ul style="list-style-type: none"> • The use of safe working practices. • The emergency network.
Underpinning Skills	<p>Demonstrate Skills in:</p> <ul style="list-style-type: none"> • respond positively to emergencies in line with practiced actions • Apply first aid casualty management techniques
Resource Implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • specifications and work instructions • Approved assessment tools • Certified assessor /Assessor's panel
Methods of Assessment	<p>Competence may be assess through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Written exam/test on underpinning knowledge • questioning or interview on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competency may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Support Irrigation Works
Unit Code	IND RTN1 07 0616
Unit Descriptor	This competence standard covers the process of supporting the installation, operation and maintenance of watering and drainage systems under direct supervision. It requires the ability to prepare materials, tools and equipment for irrigation work, undertake irrigation activities, handle materials and equipment, and clean up on completion of work. Supporting irrigation work requires knowledge of safe work practices, irrigation work techniques, irrigation tools and equipment, and repair and maintenance of irrigation components and systems.

Elements	Performance Criteria
1. Prepare materials, tools and equipment for irrigation work	<p>1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.</p> <p>1.2 Checks are conducted on all materials, tools and equipment with insufficient or faulty items reported to the supervisor.</p> <p>1.3 Techniques used when loading and unloading materials demonstrate correct manual handling and minimize damage to the load and the vehicle.</p> <p>1.4 Suitable Personal Protective Equipment (PPE) is selected and checked prior to use.</p> <p>1.5 Irrigation support is provided according to OHS requirements and according to workplace information.</p> <p>1.6 OHS hazards are identified and reported to the supervisor.</p>
2. Undertake irrigation work as directed	<p>2.1 Instructions and directions provided by supervisor are followed, and clarification sought when necessary.</p> <p>2.2 Irrigation work is undertaken in a safe and environmentally appropriate manner according to enterprise guidelines.</p> <p>2.3 Interactions with other staff and customers is carried out in a positive and professional manner.</p> <p>2.4 Enterprise policy and procedures in relation to workplace practices, handling and disposal of materials is observed.</p>

	2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.
3. Handle materials and equipment	<p>3.1 Waste materials and debris produced during irrigation work are stored in a designated area according to supervisor's instructions.</p> <p>3.2 Materials, equipment and machinery are handled and transported according to supervisor's instructions and enterprise guidelines.</p> <p>3.3 A clean and safe work site is maintained while undertaking irrigation activities.</p>
4. Clean up on completion of irrigation activities	<p>4.1 Materials are returned to store or disposed of according to supervisor's instructions.</p> <p>4.2 Tools and equipment are cleaned, maintained and stored according to manufacturer's specifications and supervisor's instructions.</p> <p>4.3 Site is made good according to supervisor's instructions and good environmental practices.</p> <p>4.4 Work outcomes are reported to the supervisor.</p>

Variable	Range
Tools and equipment	<p>May include:</p> <ul style="list-style-type: none"> Leveling equipment, wheelbarrow, string lines, tape measures, marking gauges, spades, shovels, crow bars, rakes, brooms, sanding blocks and hacksaws.
Instructions	<p>May include:</p> <ul style="list-style-type: none"> Standard Operating Procedures (SOPs), enterprise policy and procedures, specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturer's instructions, or verbal directions from manager or supervisor.
PPE	<p>May include:</p> <ul style="list-style-type: none"> Steel capped boots/shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, face mask and ear protectors.
Workplace information	May include procedures for disposing of waste materials, work instructions or verbal instructions from the supervisor.
OHS Hazards	<p>May include:</p> <ul style="list-style-type: none"> solar radiation, dust, noise, air- and soil-borne micro-organisms, chemicals and hazardous substances, sharp hand tools and equipment, manual handling, holes, and slippery and uneven surfaces.

Irrigation work	<p>May include:</p> <ul style="list-style-type: none"> • Assisting with installation of irrigation and/or drainage pipes • and components for gravity fed or pressurized systems, including digging trenches, back filling of trenches and completing other basic tasks as instructed. • Assisting with maintenance of irrigation and/or drainage systems including clearing blockages, and completing other basic tasks as instructed. • Work with a range of materials including plastic and metal pipes and components using hand tools commonly used in irrigation work. • Associated irrigation activities including assisting in establishing work base, clearing site, erecting barriers and signs, unloading and loading of materials, setting out of works, cleaning up site and disposal of debris and materials.
Waste materials	<p>May include:</p> <ul style="list-style-type: none"> • Plant debris, litter and broken components, mulches, compost, plastic, metal, and paper-based materials. These may be recycled, re-used, returned to the manufacturer, or disposed of according to enterprise work procedures.
Site is made good	<p>May include paths are swept and cleaned, work area is left in a good state, disturbed areas are repaired, all materials, debris, tools and equipment are removed from site, and other signs of disturbance or damage are corrected.</p>

Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • apply basic construction techniques of irrigation • demonstrate safe work practices • perform basic repair and maintenance of irrigation components and systems • collect and organize information
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • safe work practices • preparing for irrigation work and cleaning up on completion • basic construction techniques of irrigation • irrigation tools and equipment • maintenance practices for planted areas • basic repair and maintenance of irrigation components and systems

Underpinning Skills	<p>include the ability to:</p> <ul style="list-style-type: none"> • prepare materials, tools and equipment for irrigation work • undertake irrigation work as directed • handle materials and equipment • clean up on completion of work • collect and organize information • communicate and co-operate with other staff in completing irrigation tasks • use mathematical ideas and techniques in counting, tallying and estimation are required when handling materials, tools and equipment • use technology in the use of irrigation tools and equipment
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • access is required to real or appropriately simulated situations, including work areas, materials and equipment • documentation and information on workplace practices and OHS practices • specifications and work instructions
Methods of Assessment	<p>Competence may be assess through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Written test/Oral questioning on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Support Natural Area Conservation Works
Unit Code	IND RTN1 08 0616
Unit Descriptor	This competence standard covers the process of supporting conservation work under supervision in parks, natural areas, agricultural lands, or areas undergoing rehabilitation. It requires the ability to prepare materials, tools and equipment for conservation work, undertake conservation activities, store and stockpile materials, and clean up on completion of conservation work. Supporting conservation work requires knowledge of tools and equipment used in conservation work, revegetation techniques including planting, direct seeding, assisted natural regeneration, protection of remnant vegetation, maintenance tasks for conservation areas, common bush-land weeds, personal protective equipment, team work, and following instructions and techniques for cleaning a site and disposing of debris.

Elements	Performance Criteria
1. Prepare materials, tools and equipment for conservation work	<p>1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.</p> <p>1.2 Checks are conducted on all materials, tools and equipment with insufficient or faulty items reported to the supervisor.</p> <p>1.3 Techniques used when loading and unloading materials demonstrate correct manual handling and minimize damage to the load and the vehicle.</p> <p>1.4 Suitable Personal Protective Equipment (PPE) is selected and checked prior to use</p> <p>1.5 Conservation support is provided according to OHS requirements and according to workplace information.</p> <p>1.6 OHS hazards are identified and reported to the supervisor.</p>
2. Undertake conservation work as directed	<p>2.1 Instructions and directions provided by supervisor are followed and clarification sought when necessary.</p> <p>2.2 Conservation work is undertaken in a safe and environmentally appropriate manner according to work site guidelines.</p>

	<p>2.3 Interactions with other staff and clients are carried out in a positive and professional manner.</p> <p>2.4 Policy and procedures in relation to workplace handling and disposal of materials is observed.</p> <p>2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.</p>
3. Store and stockpile materials	<p>3.1 Aftercare Plant debris and waste material produced during conservation activities are stored in a designated area according to supervisor's instructions.</p> <p>3.2 Plant debris and waste materials are prepared and processed in an appropriate and safe manner according to supervisor's instructions.</p> <p>3.3 Surplus materials are stockpiled for removal according to supervisor's instructions.</p> <p>3.4 A clean and safe work site is maintained while completing conservation activities</p>
4. Clean up on completion of conservation work	<p>4.1 Plants and materials are stored in a designated area according to supervisor's instructions.</p> <p>4.2 Tools and equipment are cleaned, maintained and stored according to manufacturer's specifications and supervisor's instructions.</p> <p>4.3 Work outcomes are reported to the supervisor.</p>

Variable	Range
Tools and equipment	<p>May include:</p> <ul style="list-style-type: none"> • Secateurs, spades, shovels, graduated staff, clinometers, rakes; spray equipment, and hand or mechanical augers.
Instructions	<p>May include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs), specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturer's instructions, or verbal directions from manager, supervisor, or senior field operators.
PPE	<ul style="list-style-type: none"> • Steel capped boots/shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, face mask and ear protectors.
Workplace information	<p>May include:</p> <ul style="list-style-type: none"> • Procedures for disposing of waste materials, work instructions or verbal instructions from the supervisor.
OHS Hazards	<ul style="list-style-type: none"> • Heavy materials and equipment, slippery or uneven surfaces, moving machinery and vehicles, snake, spider and insect bites, solar radiation and dust.

Conservation work	<p>May include:</p> <ul style="list-style-type: none"> • Land management fieldwork including assisting with setting out of conservation works and earthworks, site surveying, manual excavations, erection of structures, draining of dams or other holding areas, and on-site erection or dismantling of structures such as protective fences and signs. • Revegetation activities including assisting with planting programs, direct seeding operations, assisted natural regeneration, assisting with natural regeneration, protection of remnant vegetation, and removal of weeds by hand, cleaning up of on-site debris, release of animals, collecting plants or seeds for propagation. • Maintenance of conservation areas including weed and disease control, mulching, pruning, fertilizing, watering, securing plants (e.g., staking, tying), repair of installation of guards and protective fencing .
Aftercare	<ul style="list-style-type: none"> • Weed and disease control, mulching, fertilizing, pruning, watering, protection such as staking, tying and installation of guards or protective fencing, securing a plant, pruning.
Waste	<ul style="list-style-type: none"> • Prompt removal of organic waste, neutralizing pits for disposal of chemicals and cleaning products, recycling plant containers.
Plants	<ul style="list-style-type: none"> • Container grown, tube grown or bare rooted trees, shrubs and groundcovers across a range of life forms and growth habits.
Supplies	<ul style="list-style-type: none"> • Plants, stakes, fertilizer, stone, tree guards and mulches

Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • prepare materials, tools and equipment for conservation work • undertake conservation work as directed • communicate ideas and information about the job, tasks and problems • collect and organize information with further clarification • apply mathematical ideas and skills in counting, tallying and estimation when handling plants or other materials • use of tools, equipment and communication systems
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Tools and equipment used in conservation work. • Re-vegetation techniques including planting, direct seeding assisted natural regeneration and protection of remnant vegetation.

	<ul style="list-style-type: none"> • Maintenance tasks for conservation areas. • Common bush land weeds • Personal protective equipment. • Team work and following instructions. • Techniques for cleaning a site and disposing of debris.
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Prepare materials, tools and equipment for conservation work • Undertake conservation work as directed • Store and stockpile materials • Clean up on completion of conservation work • Communicate ideas and information about the job, tasks and problems • Collect and organize information with further clarification • Work with others and in teams • Apply mathematical ideas and skills in counting, tallying and estimation when handling plants or other materials • Use of tools, equipment and communication systems
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • specifications and work instructions
Methods of Assessment	<p>Competence may be assess through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • interview /questioning /Written exam/test on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Support Organic Fertilizers Preparation
Unit Code	<u>IND RTN1 09 0616</u>
Unit Descriptor	This unit covers specification of the outcomes required to support organic fertilizer production, receive raw material for processing. It also recognizes raw materials and products, potential contamination, site location, handling and management requirements, identify and secure suitable raw materials to enable profitable and efficient manufacture of specified compost products

Elements	Performance criteria
1. Establish and schedule production requirements	<p>1.1 Raw material supply contracts and receivable data, sales and market trend information, and corporate marketing plan and strategy are reviewed to quantify production requirements.</p> <p>1.2 Conditions that may affect production requirements are identified in consultation with designated sales and marketing personnel.</p> <p>1.3 Production requirements across product portfolio to meet customer requirements and site and equipment capacity are estimated in consultation with designated sales and marketing personnel.</p> <p>1.4 Environmental and occupational health and safety Occupational Health and Safety(OHS) impacts are monitored for compliance with enterprise plan and license conditions.</p> <p>1.5 Facilities, personnel, machinery and equipment required for organic fertilizer production are confirmed as being available.</p> <p>1.6 Contingency plan to address potential oversupply or undersupply of raw material or product is developed and documented.</p> <p>1.7 Batch types and volumes of organic fertilizers-based products to be produced are calculated.</p> <p>1.8 Laboratory and field test data of organic fertilizer materials during and post-production is obtained.</p> <p>1.9 Production schedule is monitored and adjusted according to field and laboratory test results.</p> <p>1.10 Product is made available to customer in required quantities, to required quality and at required time</p>

<p>2. Prepare materials, tools and equipment for organic fertilizer production work.</p>	<p>2.1 Required materials, tools and equipment are identified according to supervisor instructions.</p> <p>2.2 Checks for serviceability are conducted on all materials, tools and equipment and insufficient or faulty items are reported to supervisor.</p> <p>2.3 Techniques used when loading and unloading materials demonstrate correct manual handling techniques and minimize damage to self, load and vehicle.</p> <p>2.4 Suitable personal protective clothing and equipment are selected and checked prior to use.</p> <p>2.5 Occupational Health and Safety (OHS) hazards are identified and reported to supervisor.</p>		
<p>3. Recognize, handle and locate raw materials on site</p>	<p>3.1 Raw materials are identified for potential purpose according to the need of clients.</p> <p>3.2 Characteristics of raw materials, including handling risks and potential or common contaminants are compared to site operating guidelines.</p> <p>3.3 Potential hazards in handling raw materials are identified and reported to supervisor.</p> <p>3.4 Initial handling requirements, and physical contaminant handling stockpiling location and arrangement on site are confirmed from site operating guidelines.</p> <p>3.5 Visible or physical contaminants present in raw materials are identified and recorded.</p>		
<p>4. Determine characteristics of raw materials required.</p>	<p>4.1 Relevant corporate documents are reviewed to identify commercial objectives, product range and specifications, compliance requirements and enterprise constraints.</p> <p>4.2 Current raw material supplies are reviewed for suitability for production of defined organic fertilizer products.</p> <p>4.3 Organic fertilizer recipe calculations are conducted as a gap analysis to identify complementary raw material characteristics and quantities required to manufacture defined products.</p> <p>4.4 Characteristics and quantities of additional complementary raw materials required are specified and documented.</p> <p>4.5 Complementary or substitute raw material types that are consistent with requirements are identified through review of relevant literature and enterprise information/records.</p>		
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5. Identify and prioritize raw materials required for production.	<p>5.1 Raw material options are identified and assessed in order to determine relative priority according to product range and specifications.</p> <p>5.2 Representative samples of prioritized raw materials are gained from potential sources of supply, and characteristics/risks are evaluated and confirmed.</p>
6. Secure access to raw materials.	<p>6.1 Specifications for raw material characteristics and acceptability criteria for receivable are documented for incorporation into supply contract.</p> <p>6.2 Supply contracts are negotiated and secured on suitable trading terms according to enterprise practice.</p>
7. Receive raw materials	<p>7.1 Raw materials are accurately identified and assessed against specified acceptance criteria.</p> <p>7.2 Unacceptable (non-conforming) materials are rejected according to enterprise procedures.</p> <p>7.3 Non-conformances are documented and reported according to supervisor procedures.</p> <p>7.4 Acceptable raw materials are measured, and quantity is recorded according to supervisor procedures.</p> <p>7.5 Fee is calculated based on raw material type and quantity, and charged to customer according to supervisor procedures.</p> <p>7.6 Correct fee payment is received and recorded, and receipt is provided according to supervisor procedures.</p>

Variable	Range
Raw material	<p>May include:</p> <ul style="list-style-type: none"> Animal mortalities, bio solids such as sewage sludge, crop residuals, dairy waste, fats and oils, food organics such as, food waste, kitchen waste, food processing waste, forestry residuals, manures, organic sludge's, paper mill wastes, paper-based materials, plant materials such as, garden organics, green organics, green waste, yard waste, sewage facility grit and screenings, wood and timber (not treated), other organic waste or by-product of processing.
Environmental	<p>May include:</p> <ul style="list-style-type: none"> attraction of pests, emissions from vehicle and machinery operations, erosion, fire, leaks, litter, noise, odour organic dusts, spills, water pollution from run-off or leaching, air, dust and noise, hazardous substances,

	holes and slippery or uneven surfaces, livestock, manual handling, sharp hand tools and equipment, soil-borne micro-organisms, solar radiation.
OHS	May include: <ul style="list-style-type: none"> • Personal protective clothing and equipment: ear protection, overalls and gloves, safety goggles and face masks, steel capped boots/shoes, sunhats and sunscreen lotion.
Tools and Equipment	May include: <ul style="list-style-type: none"> • Pins and buckets, boxes, forks and hoes, hoses and hose fittings, knives and secateurs, ladders, packing equipment, spades.
Instructions	May include: <ul style="list-style-type: none"> • Enterprise policies and procedures, manufacturer instructions, material safety data sheets (MSDS), specifications, standard operating procedures, verbal or written instructions from manager or supervisor, work notes.
Personal protective clothing and equipment	May include: <ul style="list-style-type: none"> • Ear protection, overalls and gloves, safety goggles and face masks, steel capped boots/shoes, sunhats and sunscreen lotion.
Raw material characteristics	May include: <ul style="list-style-type: none"> • carbon to nitrogen (C:N) ratio, contamination, electrical conductivity, moisture content, nutrient content, acidity or alkalinity (pH), structure and porosity, total carbon content, total nitrogen content.
Contaminants	May include binding and rubble, glass, metals, plastics, sharps, stone and soil, other non-biodegradable materials.
Corporate documents	May include: <ul style="list-style-type: none"> • business plan, development of consent documentation for site, enterprise receivable, operations and/or sales records, environment management plan, management system documentation, marketing plan and strategies, Material Safety Data Sheets (MSDS), policies and procedures, previous audit reports, product certification documents, product specifications and standards, raw materials, supply contracts raw materials laboratory analysis data, relevant legislation and regulations, service and utilities contracts, site license, site plan, works approval.
information/records	May include: <ul style="list-style-type: none"> • Enterprise guidelines, procedures for disposing of waste materials and verbal or written instructions from supervisor.

Assessing	May include accessibility, collection and management challenges, compost site and plant capabilities, cost and revenue implications, environmental management consideration occupational health and safety considerations, operational procedures, regulatory classification of materials and associated requirements, reliability and security of supply, risk of contamination, site licenses and constraints.
Measuring	May include scale, volume estimates, and weighs bridge.

Evidence Guide	
Critical Aspects of Competence	<p>A candidate must be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • Describe Principles of organic fertilizer • Apply safe work practices relevant to the tasks being undertaken • inspect, assess Identify, confirm, locate, handle and maintain raw materials, products and physical contaminants on site and acceptability against established criteria • maintain site arrangement and segregation of materials and products to avoid contamination • maintain site and machinery security requirements • measure, assess and record quantity of raw material • handle and report non-conformances • identify hazards in handling raw materials and implement risk control measures
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Principles of organic agriculture, including as they apply to production or amenity to agriculture • Safe work practices relevant to the tasks being undertaken, including safe use of tools and equipment • Where appropriate to rubber tree plantation activities
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • maintain site and machinery security requirements • measure, assess and record quantity of raw material • handle and report non-conformances • identify hazards in handling raw materials and implement risk control measures • Apply safe work practices relevant to the tasks being undertaken • inspect, assess, Identify, confirm, locate, handle and maintain raw materials, products and physical contaminants on site and acceptability against established criteria

Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • OHS policy, system and procedures • Advice on OHS-related personnel and nominated responsibilities • Standard operating procedures and related advice on specific safe work practices • Advice on hazards and control procedures relevant work responsibilities • Work tasks and related equipment to which OHS procedures are to be applied • Personal protective clothing and equipment as required • Emergency and/or evacuation procedures for the potential range of hazards • Storage areas for hazardous goods as required • Manual handling equipment as required • Reporting system and procedures
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Interview/ questioning /Written exam/test on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Support Latex Collection and Preservation
Unit Code	IND RTN1 10 0616
Unit Descriptor	This competence standard covers the process of supporting Latex Collection and preservation work under supervision. It requires the ability to prepare materials, tools and equipment for Latex Collection and preservation, handle materials and equipment, and clean up on completion of work. Supporting Latex Collection and preservation work requires knowledge of safe work practices related to Latex Collection and preservation task, including the use of related tools and equipment.

Element	Performance criteria
1. Prepare materials, tools and equipment for Latex Collection and preservation	<p>1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.</p> <p>1.2 Checks are conducted on all materials, tools and equipment with insufficient or faulty items reported to the supervisor.</p> <p>1.3 Techniques used when loading and unloading materials demonstrate correct manual handling and minimize damage to the load and the vehicle.</p> <p>1.4 Suitable Personal Protective Equipment (PPE) is selected and checked prior to use.</p> <p>1.5 Work support is provided according to OHS requirements and according to workplace information.</p> <p>1.6 OHS hazards are identified and reported to the supervisor.</p>
2. Undertake Latex Collection and preservation activities	<p>2.1 Instructions and directions provided by supervisor are followed and clarification sought when necessary.</p> <p>2.2 Work tasks are undertaken in a safe and environmentally appropriate manner according to enterprise guidelines.</p> <p>2.3 Interactions with other staff and customers are carried out in a positive and professional manner.</p> <p>2.4 Enterprise policy and procedures in relation to workplace practices, handling and disposal of materials is observed.</p> <p>2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.</p>

3. Handle materials and equipment	<p>3.1 Waste materials produced during work are stored in a designated area according to supervisor's instructions.</p> <p>3.2 Materials, equipment and machinery are handled and transported according to supervisor's instructions and enterprise guidelines.</p> <p>3.3 A clean and safe work site is maintained while working.</p>
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Variable	Range
Materials Tools and equipment	May include: <ul style="list-style-type: none"> • Mature rubber tree • Tools and equipment includes meter, plastic cup, weighing scale, graduated cylinder, watering can, silo, tapping knife, hanger wire, tapping gutter, rain guard
Instructions	May include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs), enterprise policy and procedures, specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturer's instructions, or verbal directions from manager or supervisor.
PPE	May include: <ul style="list-style-type: none"> • Personal protective clothing and equipment ,steel capped boots/shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, face mask , ear protectors, rain coat, soap,
Workplace information	May include: <ul style="list-style-type: none"> • Workplace information may include procedures for disposing of waste materials, work instructions or verbal instructions from the supervisor.
OHS hazards	May include: <ul style="list-style-type: none"> • solar radiation, dust, noise, air- and soil-borne micro-organisms, fire hazard, chemicals and hazardous substances, sharp hand tools and equipment, manual handling, holes, and slippery and uneven surfaces.
Tasks	May include: <ul style="list-style-type: none"> • Assistance with regular Latex Collection and preservation work, carrying out routine handling materials and equipment, fixtures and fittings.
Waste materials	May include: <ul style="list-style-type: none"> • Plant debris (bark), litter and broken components, plastic, metal, and paper-based materials. These may be recycled, re-used, returned to the manufacturer or disposed of according to enterprise work procedures.

Evidence Guide	
Critical Aspect of Competence	A candidate must be able to demonstrate the ability to: <ul style="list-style-type: none"> • Prepare materials , tools and equipment • Undertake Latex Collection and preservation activities • Handle materials and equipment
Underpinning Knowledge and Attitude	knowledge requirements <ul style="list-style-type: none"> • safe work practices • Latex Collection and preservation techniques • tools and equipment • repair and maintenance of equipments, fixtures or fittings
Underpinning Skills	These include the ability to: <ul style="list-style-type: none"> • prepare materials, tools and equipment for work • undertake work as directed • handle materials and equipment • clean up on completion of work
Resources Implication	The following resources MUST be provided: <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • specifications and work instructions
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Interview/ questioning /Written exam/test on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Basic Agricultural Operation and Natural Resources Conservation Level I	
Unit Title	Follow Basic Chemical Safety Rules
Unit Code	IND RTN1 11 0616
Unit Descriptor	This competence standard covers the functions of a person working in an enterprise which uses chemicals and who needs to be aware of their use. Skills and knowledge include awareness of the use of chemicals, how they are handled, stored and transported, recognition of safety issues surrounding chemical use, and the ability to use personal protective equipment when instructed. It requires awareness of the duty of care to self, to others, and to the environment concerning chemicals. This person will be under close supervision in the workplace and will be required to follow instructions at all times.

Elements	Performance Criteria
1. Follow workplace requirements and instructions concerning chemicals	<p>1.1 Roles and responsibilities of people in the workplace are identified.</p> <p>1.2 Safety procedures involved in chemical handling and use are recognized and followed as required.</p> <p>1.3 Occupational health and safety hazards are identified and reported to the supervisor.</p> <p>1.4 Organizational procedures are followed with regard to chemicals.</p>
2. Recognize risks associated with chemicals	<p>2.1 Functions of chemicals in the workplace are recognized.</p> <p>2.2 Chemical labels and symbols are recognized and hazards identified.</p> <p>2.3 Chemical storage locations are identified.</p> <p>2.4 Instructions for transport, handling and storage of chemicals are recognized and observed.</p> <p>2.5 Instructions for use, maintenance and storage of personal protective equipment and application equipment are identified and observed.</p>
3. Follow chemical handling and storage rules	<p>3.1 Chemical handling and storage instructions on labels are followed.</p> <p>3.2 Safety rules are followed when working in areas where chemicals are stored.</p> <p>3.3 Appropriate personal protection equipment is obtained and used when working in areas where chemicals are stored.</p>

	3.4 Procedures are followed in the event of an accident or spillage.
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Variable	Range
Roles and Responsibilities	May include: <ul style="list-style-type: none"> • Roles will include own role and may include the supervisor, farm manager, team leader, owner or external contractor, and external emergency contact organizations.
Safety procedures	May include: <ul style="list-style-type: none"> • compliance with safety instruction on the label , information contained in Material Safety Data Sheets (MSDSs) such as use, maintenance and storage of personal protective equipment, first aid, systems of transport, storage and handling, procedures for the protection of environment and protection of others.
Organizational Procedures	May include: <ul style="list-style-type: none"> • storage, transport, mixing, loading, application, emergencies, recording, cleaning and disposal of chemicals
Personal protective equipment	May include: <ul style="list-style-type: none"> • Protective hats face shields, goggles, respirators, overalls, aprons, chemical resistant gloves and footwear.
Application equipment	May include: <ul style="list-style-type: none"> • Knapsacks or hand held pneumatic sprayers, machine sprayer, drench guns and spot on applicators.
Legislation and Regulations	May include: <ul style="list-style-type: none"> • Pesticides Acts, Occupational Health and Safety Acts and associated Hazardous Substances Regulations/ Codes of Practice, Dangerous Goods Acts, Poisons Act or Protection of the Environment Acts.

Evidence Guide	
Critical Aspects of Competence	A candidate must be able to demonstrate the ability to: <ul style="list-style-type: none"> • work in an agricultural or rubber tree plantation environment • use of chemicals in the workplace, why they are used, where they are stored and how they are transported, and the safety requirements for handling chemicals • Follow instructions and report concerns if unsafe practices, equipment or environmental conditions are observed.
Underpinning Knowledge and Attitudes	Knowledge requirements include: <ul style="list-style-type: none"> • Basic Occupational Health & Safety rules required to work near and around chemicals. • Level of hazard and the Poisons Schedule

	<ul style="list-style-type: none"> • Chemicals being used for the control of pests and weeds and processing of rubber sheet. • Personal protection equipment and when and how it should be used, stored and maintained. • Correct wearing/fit of personal protective equipment. • Environmental impacts of chemical use.
Underpinning Skills	<p>include the ability to:</p> <ul style="list-style-type: none"> • Communicate information about spillages, accidents or deficiencies in procedures and practice. • Accurately interpret labels and instructions. • Follow workplace instructions and directions from the chemical label or Material Safety Data Sheets (MSDSs). • Collect, analyze and organize information on labels and Material Safety Data Sheets (MSDSs) • Work with others when dealing with chemicals. • Use mathematical ideas and techniques to interpret volumes and measurement requirements on labels • apply problem solving skills in the event of an accident or spillage • apply technology in using relevant personal protection equipment
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • specifications and work instructions
Methods of Assessment	<p>Competence may be assess through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Interview/ Questioning/ Written exam/test on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competency may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Agricultural Operation and Natural Resources Conservation Level I	
Unit Title	Collect and Process Seed
Unit Code	IND RTN1 12 0616
Unit Descriptor	This unit specifies the outcomes required collecting, process treat, and store and dispatch seed. This unit supports the attainment of skills and knowledge required for competent workplace performance in rubber tree plantation and rubber tree products operations of all sizes. The unit applies to a rubber tree plantation environment and involves application of skills and knowledge at a production worker level.

Element	Performance Criteria
1. Prepare to collect seed	<p>1.1 Applicable Occupational Health and Safety (OHS), legislative and organizational requirements relevant to collecting seed are identified and complied with.</p> <p>1.2 Work order is reviewed and clarified with appropriate personnel.</p> <p>1.3 Site environmental protection measures are complied with in accordance with relevant legislation and regulations.</p> <p>1.4 Potential locations for the collection of required seeds are identified and required approvals are sought and obtained from relevant authorities.</p> <p>1.5 Equipment and resources appropriate to work requirements are selected and checked for operational effectiveness in accordance with manufacturer's recommendations.</p> <p>1.6 Seed collecting operations are checked for safe working conditions and planned in accordance with site procedures.</p> <p>1.7 Communication with others is established and maintained in accordance with OHS requirements.</p>
2. Collect seed	<p>2.1 Plant species and condition is visually assessed and checked to ensure the collection of healthy seeds.</p> <p>2.2 Method of seed collection is selected and applied without causing damage to health of parent plant.</p> <p>2.3 Seeds are collected from a range of plants and from different areas of plants to maintain genetic diversity.</p> <p>2.4 Seed is placed in clean containers and accurately</p>

	labeled in accordance with industry, site and organizational requirements.
3. Prepare to process seed	<p>3.1 Applicable Occupational Health and Safety (OHS), legislative and organizational requirements relevant to processing seed are identified and complied with.</p> <p>3.2 Work order is reviewed and checked with appropriate personnel.</p> <p>3.3 Site environmental protection measures are complied with in accordance with relevant legislation and regulations.</p> <p>3.4 Equipment appropriate to work requirements is selected and checked for operational effectiveness in accordance with manufacturer's recommendations.</p> <p>3.5 Seed processing operations are checked for safe working conditions and planned in accordance with site procedures.</p> <p>3.6 Communication with others is established and maintained in accordance with OHS requirements.</p>
4. Process and store seed	<p>4.1 Seeds are separated from other materials, weighed and stored in accordance with species requirements and site procedures.</p> <p>4.2 Seed treatment is applied to prevent deterioration in accordance with seed species and site procedures.</p> <p>4.3 Seed information is accurately recorded in accordance with site procedures.</p> <p>4.4 Seeds are packaged for storage in accordance with industry, legislative and organizational requirements.</p> <p>4.5 Seed collection information and results are recorded and reported in accordance with site procedures.</p>
5. Prepare seed sample for viability testing	<p>5.1 Seed sample for testing is identified and checked in accordance with work order requirements.</p> <p>5.2 Seed sample is removed from lot and prepared for testing in accordance with site procedures and industry and organizational requirements.</p> <p>5.3 Representative seed sample is clearly labeled and packaged for dispatch to testing body in accordance with site procedures.</p> <p>5.4 Seed sample information is accurately recorded in accordance with site procedures.</p>

6. Dispatch seed	<p>6.1 Seed request specifications are interpreted and checked with appropriate personnel.</p> <p>6.2 Seed is retrieved from storage and quantity and species of seed is calculated to meet request specifications.</p> <p>6.3 Each seed species is weighed, documented and placed in an appropriate container in accordance with request requirements and site procedures.</p> <p>6.4 Multiple seed lots are thoroughly mixed as required in accordance with request specifications.</p> <p>6.5 Seed and seed mixtures are accurately and clearly labeled in accordance with industry requirements and site procedures.</p> <p>6.6 Dispatch of seed is organized and undertaken in accordance with request specifications and site procedures.</p> <p>6.7 Seed processing results are recorded and reported in accordance with industry requirements and site procedures.</p>
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Variable	Range
OHS	<p>May include:</p> <ul style="list-style-type: none"> • the use of personal protective equipment and clothing • safety equipment • first aid equipment • firefighting equipment • hazard and risk control • elimination of hazardous materials and substances • safe forest practices including required actions relating to forest fire • manual handling including shifting, lifting and carrying • handling of minerals/chemicals used in the treatment of
Legislative requirements	<p>May include:</p> <ul style="list-style-type: none"> • award and enterprise agreements • industrial relations • confidentiality and privacy • OHS • the environment • equal opportunity • anti-discrimination • relevant industry codes of practice • duty of care

	<ul style="list-style-type: none"> • heritage and traditional land holding issues
Organizational requirements	<p>May include:</p> <ul style="list-style-type: none"> • legal, organizational and site guidelines, policies and procedures relating to own role and responsibility, quality assurance, procedural manuals, quality and continuous improvement processes and standards, OHS, emergency and evacuation, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)
Work order	<p>May include:</p> <ul style="list-style-type: none"> • information and instructions for collecting, processing, treating and storing seed
Appropriate personnel	<p>May include:</p> <ul style="list-style-type: none"> • supervisors, suppliers, clients, colleagues, and managers
Environmental protection measures	<p>May include:</p> <ul style="list-style-type: none"> • ground growth, canopy, general forest lean, wind speed and direction, fallen trees, density of trees, ground slope, soil and water protection, ground hazards and obstacles
Approvals	<p>May include:</p> <ul style="list-style-type: none"> • licenses and permits required for commercial or non-commercial seed collection and may include government permits and landholder permits
Relevant authorities	<p>May include:</p> <ul style="list-style-type: none"> • local governments, parks/reserves managers, and forestry managers
Equipment and resources	<p>May include:</p> <ul style="list-style-type: none"> • personnel, vehicles, pruning and shaking equipment, sheets, tarpaulins, clean containers for holding seeds, vacuum seed collecting machines, ladders or elevating work platforms, personal protective equipment
Planning	<p>May include:</p> <ul style="list-style-type: none"> • consideration of seed collection seasons, when • the required species have fruit at optimal condition
Communication	<p>May include:</p> <ul style="list-style-type: none"> • verbal and non-verbal language, constructive feedback, active listening, questioning to clarify and confirm understanding, use of positive, confident and cooperative language, use of language and concepts appropriate to individual social and cultural differences, control of tone of voice and body language
Method of seed collection	<p>May include collecting after falling/felling, ladders, climbing, shaking, high-powered rifles, cherry-pickers</p>

Health of parent plant	May include hand picking or careful and selective pruning
Labeling	May include details seed location and genetic identity
Separating	May include: <ul style="list-style-type: none"> • hand selection, wind separation/winnowing, • sieving, vibrating, flotation, drying and crumbling of husks
Seed treatment	May include: <ul style="list-style-type: none"> • heat, mechanical or chemical protection against pests
Seed information	May include: <ul style="list-style-type: none"> • details of time/date of harvest, time/date of receipt into store, weight, species, place or origin of seed, container identifier
Packaging	May include: <ul style="list-style-type: none"> • vacuum sealing, use of inert atmospheres such as nitrogen and carbon dioxide, control of packing • environment (temperature, light and moisture)
Recording and reporting	May include: <ul style="list-style-type: none"> • maintained by electronic data base, card index, data sheets, and filing systems manual, using a computer-based system or another appropriate organizational communication system

Evidence Guide	
Critical Aspects of Competence	<p>A candidate must able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • apply safe and efficient techniques to collect, • treat and store a range of seed species in accordance with species requirements and organizational guidelines • Communicate effectively and work safely with others in the work area • Apply effective methods to collect a range of seed species in accordance with work order instructions and within prescribed organizational tolerances • Safely and efficiently use and maintain seed collecting equipment and resources • Efficiently and accurately treat and store seed in accordance with site and industry specifications • Accurately record seed collection information and results and maintain workplace information
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • basic knowledge of applicable legislative, regulatory or certification requirements and codes of practice relevant to the full range of processes for collecting, treating and storing seed • organizational and site standards, requirements, policies and procedures for collecting seed

	<ul style="list-style-type: none"> • principles of cultural diversity and access and equity • environmental requirements for the collecting, treating and storing of seed and the disposal of waste material • established communication channels and protocols • problem identification and resolution • types of seed collecting resources and equipment and procedures for their safe use, operation and maintenance • procedures for the recording, reporting and maintenance of workplace records and information • hazards associated with the collection, treatment and storage of seed • range of seed species and appropriate collection, treatment and packaging processes • range of seed treatments and storage requirements for different seed species • types of diseases and pests likely to infect a range of seed species • appropriate mathematical procedures for estimation, measurement and calculation
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for collecting seed • review and accurately identify work requirements • use and maintain relevant equipment and resources • identify problems and equipment faults and demonstrate appropriate response procedures • use appropriate communication and interpersonal techniques with colleagues and others • accurately record and maintain information including details of seed species, weight and place of origin • efficiently and safely carry out seed collecting procedures • apply appropriate mathematical techniques to calculate seed weights and quantities • identify a range of seed species and apply accurate identifying information • use a range of seed collection methods and related equipment • liaise or negotiate with bodies or groups internal and external to the organization • Communicate ideas and information in simple language to confirm work requirements, convey information and

	<p>requests to colleagues and report and record outcomes of seed collection, treatment and storage</p> <ul style="list-style-type: none"> • Collect, analyze and organize information by collecting, organize and understanding information required to undertake the collection, treatment and storage of seed • Plan and organize activities in the correct sequence for collecting, treating and storing seed to be completed within the designated timeframes • Working with others and in teams by using effective communication and interpersonal techniques with colleagues and others to maximize confidence, satisfaction and productivity during seed collection procedures • Use mathematical ideas and techniques by calculating time to complete tasks and quantities and weights of seed lots • Solving problems By establishing safe and effective processes for collecting seed which anticipate likely problems to avoid wastage and downtime • Use technology by selecting and using appropriate equipment and resources to collect, treat and store seed
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Access is required to real or appropriately simulated situations, including work areas, materials and equipment, • Documentation and information on workplace practices and OHS practices. • specifications and work instructions • Approved assessment tools • Certified assessor /Assessor’s panel
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Practical assessment by direct observation of tasks through simulation/Role-plays • Written exam/test on underpinning knowledge • questioning or interview on underpinning knowledge <p>Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge</p>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Operate a Personal Computer
Unit Code	<u>IND RTN1 13 0616</u>
Unit Descriptor	This unit describes the performance outcomes, skills and knowledge required to start up a personal computer or business computer terminal; to correctly navigate the desktop environment; and to use a range of basic functions.

Element	Performance Criteria
1. Start computer, system information and features	1.1 Adjust workspace, furniture and equipment to suit user ergonomic requirements 1.2 Ensure work organization meets organizational and Occupational Health and Safety (OHS) requirements for computer operation 1.3 Start or log on computer according to user procedures 1.4 Identify basic functions and features using system information 1.5 Customizes desktop configuration, if necessary, with assistance from appropriate persons 1.6 Use help functions as required
2. Navigate and manipulate desktop environment	2.1 Open, close and access features by selecting correct desktop icons 2.2 Open, resize and close desktop windows by using correct window functions and roles 2.3 Create shortcuts from the desktop, if necessary, with assistance from appropriate persons
3. Organize files using basic directory and folder structures	3.1 Create folders/subfolders with suitable names 3.2 Save files with suitable names in appropriate folders 3.3 Rename and move folders/subfolders and files as required 3.4 Identify folder/subfolder and file attributes 3.5 Move folders/subfolders and files using cut and paste, and drag and drop techniques 3.6 Save folders/subfolders and files to appropriate media where necessary 3.7 Search for folders/subfolders and files using appropriate software tools

	3.8 Restore deleted folder/subfolders and files as necessary
4. Print information	4.1 Print information from installed printer 4.2 View progress of print jobs and delete as required 4.3 Change default printer if installed and required
5. Shut down computer	5.1 Close all open applications 5.2 Shut-down computer according to user procedures

Variable	Range
Ergonomic requirements	May include: <ul style="list-style-type: none"> • avoiding radiation from computer screens • chair height, seat and back adjustment • document holder • footrest • keyboard and mouse position • lighting • noise minimization • posture • screen position • workstation height and layout
Work organization	May include: <ul style="list-style-type: none"> • exercise breaks • mix of repetitive and other activities • rest periods • Visual Display Unit (VDU) eye testing
OHS requirements	May include: <ul style="list-style-type: none"> • OHS guidelines related to the use of the screen equipment, computing equipment and peripherals, ergonomic work stations, security procedures, customization requirements • statutory requirements
Desktop icons	May include: <ul style="list-style-type: none"> • directories/folders • files • network devices • recycle bin and waste basket
File attributes	May include: <ul style="list-style-type: none"> • dates and size
Appropriate media	May include: <ul style="list-style-type: none"> • CDs • diskettes • local hard drive

	<ul style="list-style-type: none"> • other locations on a network • USB/ Flash/Thumb drives and zip disks
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Evidence Guide	
Critical aspects of Competence	Demonstrate skills and knowledge in: <ul style="list-style-type: none"> • navigation and manipulation of the desktop environment within the range of assigned workplace tasks • knowledge of organizational requirements for simple documents and filing conventions • application of simple keyboard functions to produce documents with a degree of speed and accuracy relevant to the level of responsibility required
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • key provisions of relevant legislation from all levels of government that may affect aspects of business operations, such as OHS • basic ergonomics of computer use • main types and parts of computers, and basic features of different operating systems • suitable file naming conventions
Underpinning Skills	Demonstrate skills in: <ul style="list-style-type: none"> • literacy skills to identify work requirements, to comprehend basic workplace documents, to interpret basic user manuals and to proofread simple documents • communication skills to identify lines of communication, to request advice, to effectively question, to follow instructions and to receive feedback • problem-solving skills to solve routine problems in the workplace, while under direct supervision • technology skills to use equipment safely while under direction, basic keyboard and mouse skills and procedures relating to logging on and accessing a computer • basic typing techniques and strategies
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.
Assessment Methods	Competency may be assessed through: <ul style="list-style-type: none"> • Interview /Written Test /Oral Questioning • Observation / Demonstration
Context of Assessment	Competency may be assessed in the work place or in a simulated work place setting

Occupational Standard: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Apply Quality Standards
Unit Code	IND RTN1 14 0616
Unit Descriptor	This unit covers the knowledge, attitudes and skills required in applying quality standards in the operational activities.

Elements	Performance Criteria
1. Assess own work	<p>1.1 Completed work is checked against organization standards relevant to the activity being undertaken.</p> <p>1.2 An understanding is demonstrated on how the work activities and completed work relate to the next process and to the final appearance of the service / product.</p> <p>1.3 Faulty service is identified and isolated in accordance with policies and procedures.</p> <p>1.4 Faults and any identified causes are recorded and reported in accordance with standard procedures.</p>
2. Assess quality of service rendered	<p>2.1 Services rendered are quality checked against standards and specifications.</p> <p>2.2 Service rendered are evaluated using the appropriate evaluation parameters and in accordance with standards.</p> <p>2.3 Causes of any identified faults are identified and corrective actions are taken in accordance with policies and procedures.</p>
3. Record information	<p>3.1 Basic information on the quality performance is recorded in accordance with organization procedures.</p> <p>3.2 Records of work quality are maintained according to the requirements of the organization / enterprise.</p>
4. Study causes of quality deviations	<p>4.1 Causes of deviations from final outputs or services are investigated and reported in accordance with standard procedures.</p> <p>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.</p>
5. Complete documentation	<p>5.1 Information on quality parameters and other indicators of service performance is recorded.</p> <p>5.2 All service processes and outcomes are recorded.</p>

Variable	Range
Quality check	May include but not limited to: <ul style="list-style-type: none"> • Visual inspection • Physical measurements • Check against specifications/preferences
Quality standards	May include but not limited to: <ul style="list-style-type: none"> • materials • service • output • processes/procedures
Quality parameters	May include but not limited to: <ul style="list-style-type: none"> • style/design/specifications • durability • service variations • materials • damage and imperfections

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> • Check completed work continuously against standard • Identify and isolate faulty service / workmanship • Check service rendered against organization standards • Identify and apply corrective actions on the causes of identified faults • 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 • Relevant evaluation techniques and quality checking procedures • Workplace procedures • 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 in accordance with procedures

	<ul style="list-style-type: none"> • Meet work specifications • 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: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Work with Others
Unit Code	IND RTN1 15 0616
Unit Descriptor	This unit covers the knowledge, skills, and attitudes required to develop workplace relationship and contribute in workplace activities.

Element	Performance Criteria
1. Develop effective workplace relationship	<p>1.1 Duties and responsibilities are done in a positive manner to promote cooperation and good relationship.</p> <p>1.2 Assistance is sought from workgroup when difficulties arise and addressed through discussions.</p> <p>1.3 Feedback on performance provided by others in the team is encouraged, acknowledged and acted upon.</p> <p>1.4 Differences in personal values and beliefs are respected and acknowledged in the development.</p>
2. Contribute to work group activities	<p>2.1 Support is provided to team members to ensure workgroup goals are met.</p> <p>2.2 Constructive contributions to workgroup goals and tasks are made according to organizational requirements.</p> <p>2.3 Information relevant to work are shared with team members to ensure designated goals are met.</p>

Variable	Range
Duties and responsibilities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Job description and employment arrangements • Organization's policy relevant to work role • Organizational structures • Supervision and accountability requirements including OHS • Code of conduct
Work group	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Supervisor or manager • Peers/work colleagues • Other members of the organization
Feedback on performance	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Formal/Informal performance appraisal • Obtaining feedback from supervisors and colleagues and clients

	<ul style="list-style-type: none"> • Personal, reflective behavior strategies • Routine organizational methods for monitoring service delivery
Providing support to team members	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Explaining/clarifying • Helping colleagues • Providing encouragement • Providing feedback to another team member • Undertaking extra tasks if necessary
Organizational requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Goals, objectives, plans, system and processes • Legal and organization policy/guidelines • OHS policies, procedures and programs • Ethical standards • Defined resources parameters • Quality and continuous improvement processes and standards

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • Provided support to team members to ensure goals are met • Acted on feedback from clients and colleagues • Accessed learning opportunities to extend own personal work competencies to enhance team goals and outcomes
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • relevant legislation that affects operations, especially with regards to safety • reasons why cooperation and good relationships are important • the organization's policies, plans and procedures • how to elicit and interpret feedback • workgroup member's responsibilities and duties • importance of demonstrating respect and empathy in dealings with colleagues • how to identify and prioritize personal development opportunities and options
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • read and understand the organization's policies and work procedures • write simple instructions for particular routine tasks • interpret information gained from correspondence • request advice, receive feedback and work with a team

	<ul style="list-style-type: none"> • organize work priorities and arrangement • select and use technology appropriate to a task • relate to people from a range of social, cultural and ethnic backgrounds
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: Basic Rubber Tree Plantation & Natural Resource Conservation Level I I	
Unit Title	Receive and Respond to Workplace Communication
Unit Code	IND RTN1 16 0616
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to receive, respond and act on verbal and written communication.

Element	Performance Criteria
1. Follow routine spoken messages	1.1 Required information is gathered by listening attentively and correctly interpreting or understanding information/instructions. 1.2 Instructions/information is properly recorded. 1.3 Instructions are acted upon immediately in accordance with information received. 1.4 Clarification is sought from workplace supervisor on all occasions when any instruction/information is not clear.
2. Perform workplace duties following written notices	2.1 Written notices and instructions are read and interpreted correctly in accordance with organizational guidelines . 2.2 Routine written instruction is followed in sequence. 2.3 Feedback is given to workplace supervisor based on the instructions/information received.

Variable	Range
Written notices and instructions	May include but not limited to: <ul style="list-style-type: none"> • Handwritten and printed material • Internal memos • External communications • Electronic mail • Briefing notes • General correspondence • Marketing materials • Journal articles
Organizational guidelines	May include but not limited to: <ul style="list-style-type: none"> • Information documentation procedures • Company policies and procedures • Organization manuals • Service manual

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> • Demonstrated knowledge of organizational procedures for handling verbal and written communications • Received and acted on verbal messages and instructions • Demonstrated competence in recording instructions/information
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> • organizational policies/guidelines in regard to processing internal/external information • ethical work practices in handling communications • communication process
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> • receive and clarify conciseness messages/information/communication • record messages/information accurately
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: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Demonstrate Work Values
Unit Code	IND RTN1 17 0616
Unit Descriptor	This unit covers the knowledge, skills and attitude required in demonstrating proper work values.

Elements	Performance Criteria
1. Define the purpose of work	<p>1.1 One's unique sense of purpose for working and the 'whys' of work are identified, reflected on and clearly defined for one's development as a person and as a member of society.</p> <p>1.2 Personal mission is achieved in harmony with company's values</p>
2. Apply work values/ethics	<p>2.1 Work values/ethics/concepts are classified and reaffirmed in accordance with the transparent company ethical standards, policies and guidelines.</p> <p>2.2 Work practices are undertaken in compliance with industry work ethical standards, organizational policy and guidelines</p> <p>2.3 Personal behavior and relationships with co-workers and/or clients are conducted in accordance with ethical standards, policy and guidelines.</p> <p>2.4 Company resources are used in accordance with transparent company ethical standard, policies and guidelines.</p>
3. Deal with ethical problems	<p>3.1 Company ethical standards, organizational policy and guidelines on the prevention and reporting of unethical conduct are accessed and applied in accordance with transparent company ethical standard, policies and guidelines.</p> <p>3.2 Work incidents/situations are reported and/or resolved in accordance with company protocol/guidelines.</p> <p>3.3 Resolution and/or referral of ethical problems identified are used as learning opportunities.</p>
4. Maintain integrity of conduct in the workplace	<p>4.1 Personal work practices and values are demonstrated consistently with acceptable ethical conduct and company's core values.</p> <p>4.2 Instructions to co-workers are provided based on ethical, lawful and reasonable directives.</p>

	4.3 Company values/practices are shared with co-workers using appropriate behavior and language.
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Variable	Range
Work values/ethics/concepts	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • Commitment/ Dedication • Sense of urgency • Sense of purpose • Love for work • High motivation • Orderliness • Reliability and Dependability • Competence • Goal-oriented • Sense of responsibility • Being knowledgeable • Loyalty to work/company • Sensitivity to others • Compassion/Caring attitude • Balancing between family and work • Sense of nationalism
Work practices	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • Quality of work • Punctuality • Efficiency • Effectiveness • Productivity • Resourcefulness • Innovativeness/Creativity • Cost consciousness • 5S • Attention to details
Company resources	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • Consumable materials • Equipment/Machineries • Human • Time • Financial resources

Work incidents/ Situations	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • Violent/intense dispute or argument • Gambling • Use of prohibited substances • Pilferages • Damage to person or property • Vandalism • Falsification • Bribery • Sexual Harassment • Blackmail
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Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • Defined one's unique sense of purpose for working • Clarified and affirmed work values/ethics/concepts consistently in the workplace • Demonstrated work practices satisfactorily and consistently in compliance with industry work ethical standards, organizational policy and guidelines • Demonstrated personal behavior and relationships with co-workers and/or clients consistent with ethical standards, policy and guidelines • Used company resources in accordance with company ethical standard, policies and guidelines. • Followed company ethical standards, organizational policy and guidelines on the prevention and reporting of unethical conduct/behavior
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Occupational health and safety • Work values and ethics • Company performance and ethical standards • Company policies and guidelines • Fundamental rights at work including gender sensitivity • Work responsibilities/job functions • Corporate social responsibilities • Company code of conduct/values • Balancing work and family responsibilities
Underpinning Skills	<p>Demonstrates skills in:</p> <ul style="list-style-type: none"> • Interpersonal skills • Communication skills • Self awareness, understanding and acceptance • Application of good manners and right conduct

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: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Develop Understanding of Entrepreneurship
Unit Code	IND RTN1 18 0616
Unit Descriptor	This unit covers knowledge, skills and attitude required to understand the concepts, principles, functions, strategies and methods of entrepreneurship. It also covers identifying and developing the entrepreneurial competencies.

Elements	Performance Criteria
1. Describe and explain the concept, principles, and scope of entrepreneurship	<p>1.1 The concept and principles of entrepreneurship are analyzed and discussed.</p> <p>1.2 Entrepreneurial traits and distinguishing features, entrepreneurial motivations and types of entrepreneurs are identified and discussed.</p> <p>1.3 The role of entrepreneurship development for the Ethiopian economy is explained and discussed.</p> <p>1.4 Entrepreneurship for women and disables is discussed and analyzed.</p>
2. Discuss how to become an entrepreneur	<p>2.1 The positive mind set, attitude towards poverty and “can do mentality” is developed.</p> <p>2.2 Self-employment as an individual economic independence and personal growth is discussed and analyzed.</p> <p>2.3 Advantages and disadvantages of self-employment and being an employee are explained and discussed.</p> <p>2.4 Major competencies of successful entrepreneurs are identified and explained.</p> <p>2.5 Self-potential is assessed to determine if qualified to become an entrepreneur.</p> <p>2.6 The behaviors of successful entrepreneurs are identified and discussed.</p> <p>2.7 Business ideas are generated using appropriate tools, techniques and steps.</p> <p>2.8 Business opportunities are identified and assessed.</p>
3. Discuss how to start and organize an enterprise	<p>3.1 The concepts and legal forms of business enterprises in Ethiopia are identified and discussed</p> <p>3.2 Business Ethics is understood and developed.</p>

	<p>3.3 Facts about micro, small and medium enterprises are discussed, clarified and understood.</p> <p>3.4 Key success factors in setting up micro, small and medium businesses are identified and explained.</p> <p>3.5 Procedures for identifying suitable market for business are discussed and understood.</p> <p>3.6 Major factors to consider in selecting a location for a business are identified and discussed.</p> <p>3.7 Amount of money needed to start an enterprise is estimated and various sources of finance identified and discussed.</p>
<p>4. Discuss how to operate an enterprise</p>	<p>4.1 Processes of hiring and managing people are explained and discussed.</p> <p>4.2 The importance, techniques and application of self-management skills, negotiation skills and time management skills, decision skills are discussed and understood.</p> <p>4.3 The techniques and procedures of managing sales are explained and discussed.</p> <p>4.4 Factors to be considered in selecting suppliers and the steps to follow when doing business with them are identified and discussed.</p> <p>4.5 Awareness of how new technologies can affect micro, small and medium business is developed, and Characteristics of appropriate technology for use are explained and discussed.</p> <p>4.6 Risk assessment and management of business enterprise are performed regularly.</p> <p>4.7 Qualities are properly inspected and inventories properly managed.</p> <p>4.8 Basic concepts of Monitoring and Evaluation are explained and understood.</p>
<p>5. Discuss how to prepare and use financial records</p>	<p>5.1 Importance of financial source documents and record keeping is discussed.</p> <p>5.2 Financial recording documents are identified and prepared.</p> <p>5.3 Different types of cost and expense that occur in a business and how to manage them are discussed and</p>

	<p>understood.</p> <p>5.4 Factors and procedures in knowing the cost and expense of the enterprise are discussed and understood.</p> <p>5.5 Simple financial statements are prepared and understood</p>
6. Develop one's own business plan	<p>6.1 The concept, importance and process of preparing/ writing a business plan are discussed and understood</p> <p>6.2 Feasibility of the business idea is made clear and understood.</p> <p>6.3 Findings of the feasibility study are interpreted, assessed and analyzed.</p> <p>6.4 Standard structure and format are applied in preparing business plan.</p> <p>6.5 Problems that may arise or encounter when starting a business are identified and understand.</p>

Variables	Range
Legal forms	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Sole proprietorship • Partnership • Cooperatives • Private Limited Company
Business Enterprises	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Micro • Small • Medium
Major factors	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Economics (local economy) • Population • Competition
Financial source documents	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Cash book • Vouchers • Invoices • Receipts • Check
Financial recording documents	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Journal • Ledger • Fixed asset records

	<ul style="list-style-type: none"> • Inventory record • Payroll sheet • Account receivable • Account payable • Daily sales record
Feasibility of the business	<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

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Explain principles and concept of entrepreneurship • Discuss how to become entrepreneur • Discuss how to organize an enterprise • Discuss how to operate an enterprise • Discuss how to prepare and use financial records • Develop business plan
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Entrepreneurship concepts, principles, roles and types • Entrepreneurial traits, motivation and distinguishing features • Types of entrepreneurs • Entrepreneurial competencies • Entrepreneurial behaviors • Business ideas and business opportunities • Self potential assessment • Types of enterprises • Legal forms of business ownership • Risk assessment and evaluation • Self-employment and employment • Managing sales, people and time • Facts about micro, small and medium enterprises • Micro, Small and Medium Enterprises • Key success factors for setting up micro, small and medium enterprises

	<ul style="list-style-type: none"> • Procedures for identifying suitable markets • Business location • Major factors for selecting business location • Quality control • Inventory management • Monitoring and evaluation • New technologies • Startup capital • Investment capital • Working capital • Financing options • Financial records • Costs and expenses • Business plan and Feasibility study
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Planning, organizing, hiring and leading skills • Self-management skills • Negotiation skills • Time management skills • Problem solving skills • Decision making skills • Selling skills • Risk assessment skills • Presentation skills • Inventory controlling skills • Using technology • Financial record keeping skills • Preparing simple financial statement • Financial reporting skills • Managing money • Suppliers selection skills • Monitoring and evaluation skills
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: Basic Rubber Tree Plantation & Natural Resource Conservation Level I	
Unit Title	Apply 3S
Unit Code	IND RTN1 19 0616
Unit Descriptor	This unit of competence covers the knowledge, skills and attitudes required by a worker to apply 3S techniques to his/her workplace. The unit assumes the worker has a particular job in the allocated workplace known by the individual.

Elements	Performance Criteria
1. Organize junior Kaizen Promotion Team (KPT).	<p>1.1 Basics, principles and stages of KPT are identified using appropriate procedures.</p> <p>1.2 Structure of Junior KPT is established in accordance with the organizational procedures.</p> <p>1.3 Effective and appropriate contributions are made to complement team activities and objectives using individual skills and competencies.</p> <p>1.4 Effective and appropriate forms of communications are used and undertaken with KPT members who contribute to know KPT activities and objectives.</p> <p>1.5 Kaizen Board (Visual Management Board) is prepared and used in harmony with different workplace contexts.</p>
2. Prepare for work.	<p>2.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>2.2 Job specifications are read and interpreted following working manual.</p> <p>2.3 OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>2.4 Appropriate materials are selected.</p> <p>2.5 Safety equipment and tools are identified and checked for safe and effective operation.</p>
3. Sort items.	<p>3.1 Plan is prepared to implement sorting activities.</p> <p>3.2 Cleaning activities are performed.</p> <p>3.3 All items in the workplace are identified following the appropriate procedures.</p> <p>3.4 Necessary and unnecessary items are listed using the appropriate format.</p>

	<p>3.5 Red tag strategy is used for unnecessary items.</p> <p>3.6 Unnecessary items are evaluated and placed in an appropriate place other than the workplace.</p> <p>3.7 Necessary items are recorded and quantified using appropriate format.</p> <p>3.8 Performance results are reported using appropriate formats.</p> <p>3.9 Necessary items are regularly checked in the workplace.</p>
4. Set all items in order.	<p>4.1 Plan is prepared to implement set in order activities.</p> <p>4.2 General cleaning activities are performed.</p> <p>4.3 Location/layout, storage and indication methods for items are decided.</p> <p>4.4 Necessary tools and equipment are prepared and used for setting in order activities.</p> <p>4.5 Items are placed in their assigned locations.</p> <p>4.6 After use, the items are immediately returned to their assigned locations.</p> <p>4.7 Performance results are reported using appropriate formats.</p> <p>4.8 Each item is regularly checked in its assigned location and order.</p>
5. Perform shine activities.	<p>5.1 Plan is prepared to implement shine activities.</p> <p>5.2 Necessary tools and equipment are prepared and used for shinning activities.</p> <p>5.3 Shine activity is implemented using appropriate procedures.</p> <p>5.4 Performance results are reported using appropriate formats.</p> <p>5.5 Regular shinning activities are conducted.</p>

Variable	Range
Junior KPT	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • 3S • 3MU (Mura, Muri and MUDA) • 4P (Policy, Procedure, People and Plant) • 4M (Material, Method, Man and Machine) • PDCA (Plan, Do, Check and Act)

OHS requirements	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • 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
Items	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • tools • jigs/fixtures • materials/components • machine and equipment • manuals • documents • personal items (e.g. bags, lunch boxes and posters) • safety equipment and personal protective equipment • other items which happen to be in the work area
The appropriate procedures	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • steps for implementing 3S (sort, set in order and shine) activities. • written, verbal and computer based or in some other format.
Unnecessary items	<p>are not needed for current production or administrative operation and include but not limited to:</p> <ul style="list-style-type: none"> • defective or excess quantities of small parts and inventory • outdated or broken jigs and dies • worn-out bits

	<ul style="list-style-type: none"> • outdated or broken tools and inspection gear • old rags and other cleaning supplies • electrical equipment with broken cords • outdated posters, signs, notices and memos <p>some locations where unneeded items tend to accumulate may include but not limited to:</p> <ul style="list-style-type: none"> • in rooms or areas not designated for any particular purpose • in corners next to entrances or exists • along interior and exterior walls • next to partitions and behind pillars • under the eaves of warehouses • under desks and shelves and in desk and cabinet drawers • near the bottom of tall stacks of items • on unused management and production schedule boards • in tools boxes that are not clearly sorted
Appropriate format	<p>may include but not limited to:</p> <ul style="list-style-type: none"> • all items. • necessary items. • unnecessary items.
Red tag	<p>may include but not limited to:</p> <p>A format prepared with a red color paper or card which is filled and attached temporarily on the unnecessary items until decision is made. The red tag catch people's attention because red is a color that stands out. So to fill and attach red tag on items, asks the following three questions:</p> <ul style="list-style-type: none"> • Is this item needed? • If it is needed, is it needed in this quantity? • If it is needed, does it need to be located here?
Necessary items	<p>Are required in the workplace for current production or administrative operation in the amount needed.</p>
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

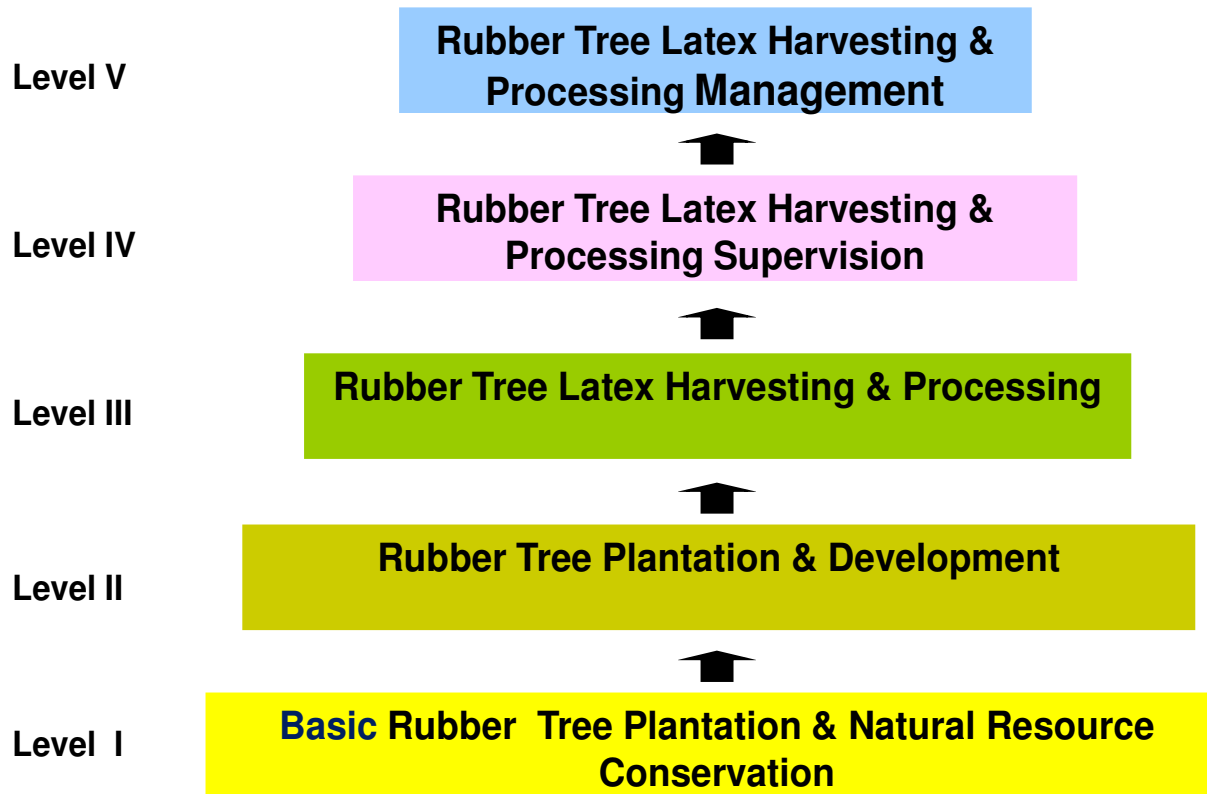
Shine activity	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Inspection • Cleaning • Minor maintenance may include: <ul style="list-style-type: none"> ➢ Tightening bolts ➢ Lubrication and replacing missing parts
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Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Discuss how to organize KPT. • Describe the pillars of 5S. • Implement 3S in own workplace by following appropriate procedures.
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Kaizen principle, pillars and concept • Key characteristic of Kaizen • Elements of Kaizen • Wastes/MUDA • Basics of KPT • Aims, benefits and principles of KPT • Stages of KPT • Structure and role of the components of Junior KPT • Concept and parts of Kaizen board • Concept and benefits of 5S • The pillars of 5S • Three stages of 5S application • Benefits and procedure of sorting activities • The concept and application of Red Tag strategy • OHS procedures • Benefits and procedure of set in order activities • Set in order methods/techniques • Benefits and procedure of shine activities • Inspection methods • Planning and reporting methods • Method of Communication
Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • Participating actively in KPT • technical drawing • communication skills • planning and reporting own tasks in implementation of 3S • following procedures to implement 3S in own workplace • using sorting formats to identify necessary and unnecessary items

	<ul style="list-style-type: none"> • improving workplace layout following work procedures • preparing labels, slogans, etc. • reading and interpreting documents • observing situations • gathering evidence by using different means • recording activities and results using prescribed formats • working with others • solving problems by applying 3S • preparing and using Kaizen board • preparing and using tools and equipment to implement 3S
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.

Sector: INDUSTRY DEVELOPMENT

Sub-Sector: RUBBER TREE DEVELOPMENT



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This Occupational Standard was developed on June 2016 at Center of Excellence for Engineering (CEE), Addis Ababa, Ethiopia.

COMMENT TEMPLATE

The Federal TVET Agency values your feedback of the document.
If you would like someone to personally contact you, please provide the following information:
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