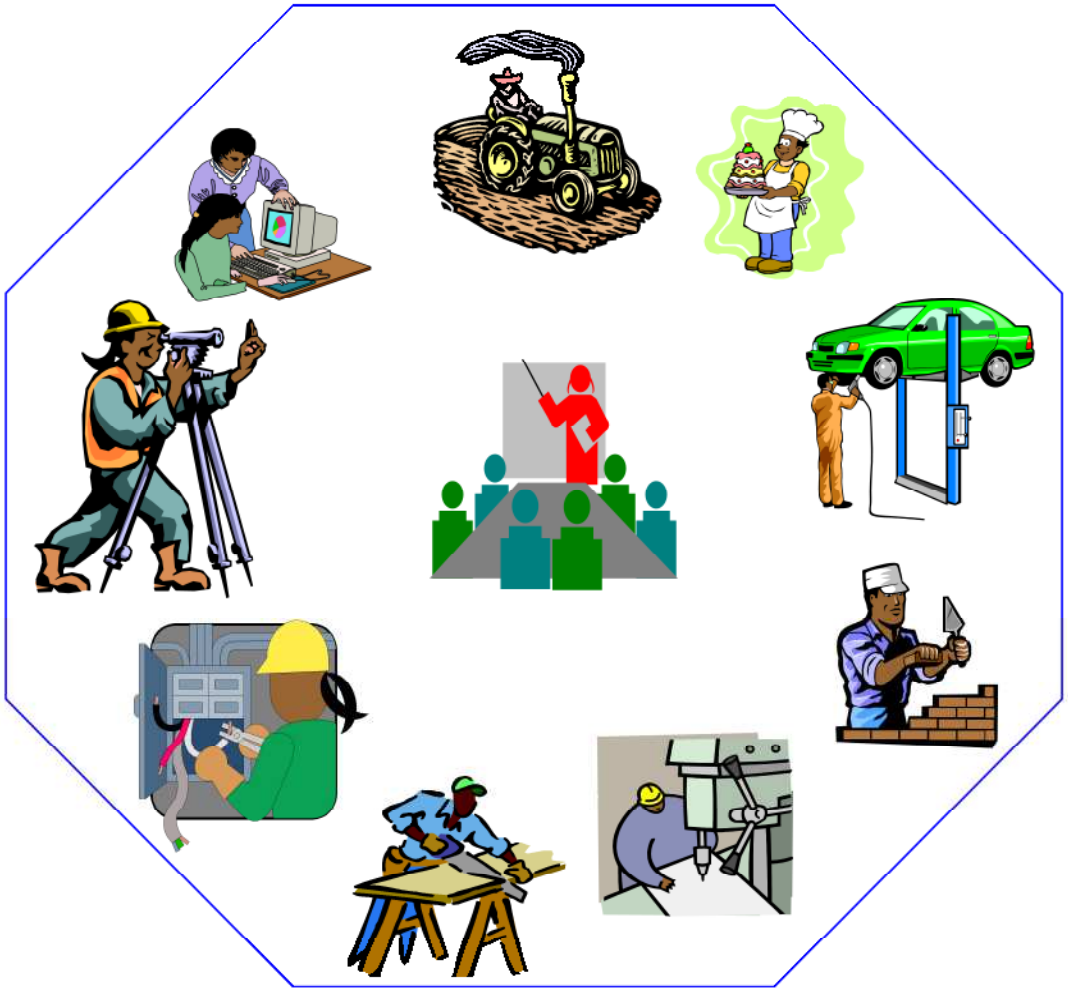
Federal Democratic Republic of Ethiopia

OCCUPATIONAL STANDARD

GRAIN AND EDIBLE OIL PROCESSING

NTQF Level III



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

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

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

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

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

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

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

UNIT OF COMPETENCE CHART

Occupational Standard: Grain and Edible Oil Processing

Occupational Code: IND GOP

NTQF Level III

IND GOP3 01 0613 Set Up a Production or Packaging Line for Operation	IND GOP3 02 0613 Operate Interrelated Processes in a Production System	IND GOP3 03 0613 Operate Interrelated Processes in a Packaging System
IND GOP3 04 0613 Monitor the Implementation of Quality and Food Safety Programs	IND GOP3 05 0613 Monitor Storage Facilities	IND GOP3 06 0613 Apply Competitive Manufacturing Practices
IND GOP3 07 0613 Perform Basic Tests	IND GOP3 08 0613 Apply Raw Materials, Ingredient and Process Knowledge to Production Problems	IND GOP3 09 0613 Monitor and Handle By-Products Storages
IND GOP3 10 0613 Identify Equipment Faults	IND GOP3 11 0613 Work Safely With Industrial Chemicals and Materials	IND GOP3 12 0613 Use Numerical Application in the Workplace
IND GOP3 13 0613 Apply First Aid	IND GOP3 14 0613 Monitor Implementation of Work Plan/Activities	IND GOP3 15 0613 Apply Quality Control
IND GOP3 16 0613 Lead Work Place Communications	IND GOP3 17 0613 Lead Small Teams	IND GOP3 18 0613 Improve Business Practice
IND GOP3 19 0613 Prevent and Eliminate MUDA		

Occupational Standard: Grain and Edible Oil Processing Level III	
Unit of Competence	**Set Up a Production or Packaging Line for Operation**
Unit Code	**IND GOP3 01 0613**
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up multiple production or packaging processes and/or conduct multiple process changeovers for operation by others.

Elements	Performance Criteria
1. Prepare for line setup	1.1. Materials are confirmed and available to meet production requirements, 1.2. ***Equipment*** and related accessories are confirmed, available and fit for use to meet production requirements. 1.3. Tools and equipment required for line setup are available, operational and fit for use to meet operational requirements. 1.4. Processing parameters and settings are identified to meet production or packaging requirements.
2. Set up the line for operation	2.1. Cleaning and maintenance requirements and status are identified and ***confirmed***. 2.2. Equipment is inspected to confirm condition. 2.3. Machine settings are selected or adjusted as required to meet safety and production requirements. 2.4. Processing or packaging parameters are entered as required to meet production requirements. 2.5. Equipment performance is checked and adjusted as required. 2.6. Pre-start checks are carried out as required by workplace requirements. 2.7. Line setup is completed to match production or packaging schedule and operating requirements. 2.8. The line is ready and safe to operate and any maintenance requirements are reported according to workplace reporting requirements. 2.9. Work is conducted in accordance with workplace environmental guidelines. 2.10. Relevant personnel are notified of setup completion.

Variables	Range
Equipment adjustment	May include but not limited to: • limited use of hand tools, such as Allen keys and screwdrivers, within level of responsibility
Confirming cleaning requirements and status	May include but not limited to: • accessing cleaning records
Workplace information	May include but not limited to: • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • standard forms and reports

Evidence Guide	
Critical Aspects of competence	A candidate must demonstrate the ability to: • conduct pre-start checks on machinery used for production to determine cleaning, maintenance and operation readiness • determine production parameters and requirements • set up line according to production requirements • take corrective action in response to typical faults and inconsistencies • complete workplace records and communicate line status with other personnel as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • Apply food safety procedures.
Underpinning Knowledge	Demonstrate Knowledge of: • basic operating principles of equipment and related accessories, including equipment adjustment points, range and location/alignment requirements of sensors and related feedback instruments, and status and purpose of guards • operating capacities of equipment used in the work area, such as different types of equipment and/or components as required by processing operations • nature of setup/changeover requirements, such as product compatibility and related cleaning requirements, impact of variation in materials or product on setup requirements, equipment and/or attachment changeovers related to given products • typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

	• pre-start checks required by setup/changeover • related processes and personnel dependent on line setup, and communication responsibilities • isolation, lock out and tag out procedures and responsibilities • Occupational Health and Safety (OHS) hazards and controls • procedures and responsibility for reporting equipment performance information • basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment • routine maintenance requirements and procedures where relevant
Underpinning Skills	Demonstrate skills to: • access production/packing schedule and related information to identify line setup/changeover requirements, such as checking product sequencing and compatibility, confirming that the required cleaning and/or sanitation has occurred and required packaging components and consumables are available as appropriate • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary equipment and related attachments, materials and services for production • confirm supply of necessary equipment and services to carry out setup operations • set and/or adjust equipment to meet production/packaging requirements, including selecting the required parameters or equipment settings, and changing processing set points as required • position safety guards and cancel isolation/lockouts ready for operation • confirm that sensors and related feedback instruments are correctly positioned and operational • operate equipment to confirm equipment setup and make final adjustments as required • time setup activities to meet production requirements • advise affected work areas/personnel of completion of setup • maintain work area to meet housekeeping standards • load and/or position materials/ingredients/product and/or packaging consumables according to enterprise procedures

	• use the control panel/system to set and adjust equipment components according to enterprise procedures • conduct routine maintenance according to enterprise procedures • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Operate Interrelated Processes in a Production System**
Unit Code	**IND GOP3 02 0613**
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate and adjust interrelated processes in a production system.

Elements	Performance Criteria
1. Prepare the production system for operation	1.1. Equipment, materials and services are confirmed and available to meet production requirements. 1.2. ***Cleaning requirements and equipment status*** are identified and confirmed. 1.3. Machine settings are selected or adjusted as required to meet safety and production requirements. 1.4. Processing/operating parameters are entered as required to meet production requirements. 1.5. Materials, ingredients and/or product are loaded or positioned as required to meet production requirements. 1.6. Pre-start checks are carried out as required by workplace requirements. 1.7. Equipment performance is checked and adjusted as required. 1.8. Equipment is made ready and safe to operate.
2. Operate and monitor the production system	2.1. The ***system*** is started up and operated according to company ***policies and procedures***. 2.2. System equipment components are monitored to identify variation in operating conditions. 2.3. Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements. 2.4. The production system is monitored to confirm that specifications are met. 2.5. Out-of-specification product/process outcomes are identified, rectified and/or reported to maintain the process within specification. 2.6. The work area is maintained according to housekeeping standards. 2.7. Work is conducted in accordance with workplace environmental guidelines.

3. Hand over production system operation	3.1. Workplace records are maintained according to workplace recording requirements. 3.2. ***Handover*** is carried out according to workplace procedures. 3.3. Process operators are aware of system and related equipment status at completion of handover.
4. Shut down the production system	4.1. The appropriate shutdown procedure is identified. 4.2. The system is shut down according to workplace procedures. 4.3. Maintenance requirements are identified and reported.
5. Contribute to continuous improvement of the production system	5.1. System performance is reviewed against output plan/targets. 5.2. Opportunities for system improvement are identified and investigated. 5.3. Proposals for improvement are developed and implemented within company planning arrangements, authority levels and according to company procedures.

Variable	**Range**
Confirming cleaning requirements and status	May include but not limited to: • accessing cleaning records
Systems	May include but not limited to: • a series of interrelated processes that must be coordinated and concurrently operated to produce the required outcome
Policies and procedures	May include but not limited to: • Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Handovers	may be done in person or via recording/communication systems according to workplace arrangements
Operation and monitoring of equipment and system processes	May include but not limited to: • the use of control panels and systems
Workplace information	May include but not limited to: • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • performance records and reports
System operation	May include but not limited to: • coordination of operators of system components

Shutdown procedures	May include but not limited to: • cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)
Legislative requirements	May include but not limited to: • the Food Standards Code, including labeling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge to: • conduct pre-start checks on production system components • confirm machine setup is ready to achieve production requirements • correctly use required personal protective equipment • start, operate, monitor and adjust process equipment throughout the system to achieve required quality outcomes • identify system problems and take corrective action • conduct operational handovers • shut down system • identify and investigate opportunities for operational improvements within areas of responsibility • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • Apply food safety procedures.
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • purpose and basic principles of the production system, including the system process flow, the interrelationships of each process to identify the impact of variation on related processes, and optimization options • basic operating principles of equipment and related accessories used by the system, including equipment adjustment points, status and purpose of guards, and range and location/alignment requirements of sensors and related feedback instruments • operating capacities of equipment used in the system, such as different types of equipment and/or components as required by processing/packaging operations • related systems and responsibilities for interaction, such as related production systems, services supply, packaging/warehousing, maintenance, laboratory/quality assurance and planning and scheduling

	• product characteristics and common types of variation in materials and/or ingredients used, including the effect of variation on each stage of the system and scope to adjust or correct • typical production related problems, including equipment faults, common causes and warning signs, incorrect or poor supply of materials, incorrect settings and poor operator control • relevant procedures, specifications and operating parameters for the system and the individual processes • isolation, lock out and tag out procedures and responsibilities • hazards, risks, controls and methods for monitoring processes within the system, including Occupational Health and Safety (OHS) , food safety, quality and environmental hazards and risks • workplace system and approach to equipment maintenance • process improvement procedures and related consultative arrangements • troubleshooting procedures and problem solving techniques • communication responsibilities to inform related work areas/support functions and other shifts of operational status and production issues • procedures and responsibility for reporting production and performance information
Underpinning Skills	Demonstrate skills to: • access production schedule and related information to identify system output and operating requirements, such as planning daily production schedules and/or modifying plans to respond to operating conditions and customer requirements • liaise with relevant work areas to confirm and/or secure necessary materials, services, equipment and labor to meet production requirements • confirm supply of necessary equipment and related attachments, materials and services • select, fit and use personal protective clothing and/or equipment • set and/or adjust equipment to meet process output requirements, including inspecting equipment condition to identify any signs of wear, confirming selection of appropriate settings and/or related parameters, ensuring that isolation or lock outs are cancelled as required, confirming that equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming

	that all safety guards are in place and operational (checks may be done by the system operator or involve observing/supporting others setting and adjusting equipment and conducting pre-start checks) • load and/or position materials, ingredients and/or product as required • operate and monitor the production system, such as use of a process control system and/or observing/supporting others to follow correct operating procedures • monitor materials flow and work-in-progress through the system • confirm that the system operates within specified parameters and inspection/ control points are monitored • determine responses to out-of-specification results or non-conformance within level of responsibility • monitor operating efficiencies of the system, including recognition of signs and symptoms of faulty equipment and early warning signs of other potential problems • investigate, resolve and/or report problems and faults • plan scheduled events to minimize disruption to production • conduct/coordinate product or batch changeovers • conduct/coordinate shift handovers • review and maintain procedures to support system improvements • maintain work area to meet housekeeping standards • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Operate Interrelated Processes in a Packaging System**
Unit Code	**IND GOP3 03 0613**
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate and adjust interrelated processes in a packaging system.

Elements	Performance Criteria
1. Prepare the packaging system for operation	1.1. Equipment, materials and services are confirmed and available to meet packaging requirements. 1.2. Cleaning requirements and equipment status are identified and confirmed. 1.3. Machine settings are selected or adjusted as required to meet safety and production requirements. 1.4. Operating parameters are entered as required to meet production requirements. 1.5. Product and/or packaging components and consumables are loaded or positioned as required to meet packaging requirements. 1.6. Pre-start checks are carried out as required by workplace requirements. 1.7. Equipment performance is checked and adjusted as required. 1.8. Equipment is ready and safe to operate.
2. Operate and monitor the packaging system	2.1. The system is started up and operated according to company ***policies and procedures***. 2.2. ***System equipment components are monitored*** to identify variation in operating conditions. 2.3. Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements. 2.4. The system is monitored to confirm that packaging specifications are met. 2.5. Out-of-specification product/packaging outcomes are identified, rectified and/or reported to maintain the process within specification. 2.6. The work area is maintained according to housekeeping standards.

	2.7. Work is conducted in accordance with workplace environmental guidelines.
3. Hand over packaging system operation	3.1. Workplace records are maintained according to workplace recording requirements. 3.2. ***Handover*** is carried out according to workplace procedures. 3.3. Process operators are aware of system and related equipment status at completion of handover.
4. Shut down the packaging system	4.1. The appropriate ***shutdown procedure*** is identified. 4.2. The system is shut down according to workplace procedures. 4.3. Maintenance requirements are identified and reported.
5. Contribute to continuous improvement of the system	5.1. System performance is reviewed against output plan/targets. 5.2. Opportunities for system improvement are identified and investigated. 5.3. Proposals are developed and implemented for improvement within company planning arrangements, authority levels and according to company procedures.

Variable	**Range**
Policies and procedures	May include but not limited to: • Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Operation and monitoring of equipment and system processes	May include but not limited to: • the use of control panels and systems
Handovers	May include but not limited to: • in person or via recording/communication systems according to workplace arrangements
Shutdown procedures	May include but not limited to: • cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)
Workplace information	May include but not limited to: • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • performance records and reports
System operation	May include but not limited to: • coordination of operators of system components

Legislative requirements	May include but not limited to: • the Food Standards Code, including labeling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge to: • conduct pre-start checks on packaging system components • confirm machine set up is ready to achieve packing requirements • correctly use required personal protective equipment • start, operate, monitor and adjust process equipment throughout the system to achieve required quality outcomes • identify system problems and take corrective action • conduct operational handovers • shut down system • identify and investigate opportunities for operational improvements within areas of responsibility • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • Apply food safety procedures.
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • purpose and basic principles of the packaging system, including the process flow and the interrelationships of each previous processes that can affect packaging outcomes, packaging technology, and packaging equipment components • basic operating principles of equipment and related accessories used by the system, including equipment adjustment points, status and purpose of guards, and range and location/alignment requirements of sensors and related feedback instruments • operating capacities of equipment used in the system, such as different types of equipment and/or components as required by processing/packaging operations • related systems and responsibilities for interaction, such as related production and further packaging/storage stages, services supply, maintenance, laboratory/quality assurance and planning and scheduling • technical knowledge of product/packaging characteristics and the main factors that impact on shelf-life

	• typical packaging related problems, including equipment faults, common causes and warning signs, incorrect or poor supply of materials and finished product, incorrect settings and poor operator control • relevant procedures, specifications and operating parameters for the system and the individual processes • isolation, lock out and tag out procedures and responsibilities • hazards, risks, controls and methods for monitoring processes within the system, including Occupational Health and Safety (OHS) , food safety, quality and environmental hazards and risks • workplace system and approach to equipment maintenance • process improvement procedures and related consultative arrangements • troubleshooting procedures and problem solving techniques • communication responsibilities to inform related work areas/support functions and other shifts of operational status and production issues • procedures and responsibility for reporting production and performance information
Underpinning Skills	Demonstrate skills to: • access production/packaging schedule and related information to identify packaging output and operating requirements, such as establishing daily packaging priorities and/or modifying plans to respond to customer requirements • liaise with relevant work areas to confirm and/or secure necessary materials, services, equipment and labor to meet production requirements • confirm supply of necessary equipment and related attachments, materials and services • select, fit and use personal protective clothing and/or equipment • set and/or adjust equipment to meet packaging requirements, such as inspecting equipment condition to identify any signs of wear, confirming selection of appropriate settings and/or related parameters, ensuring that isolation or lock outs are cancelled as required, confirming that equipment is clean and correctly configured for packaging requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational (checks may be done by the system operator or involve observing/supporting others setting and adjusting equipment and conducting pre-start checks)

	• load and/or position product, packaging components and consumables as required • operate and monitor the packaging system, such as use of a process control system and/or observing/supporting others to follow correct operating procedures • monitor materials flow and work-in-progress to and from the packaging system • confirm that the packaging system operates within specified parameters and inspection/control points are monitored • determine responses to out-of-specification packaging or non-conformance within level of responsibility • monitor operating efficiencies of the system, including recognition of signs and symptoms of faulty equipment and early warning signs of other potential problems • investigate, resolve and/or report problems and faults • plan scheduled events to minimize disruption to production • conduct/coordinate product/packaging changeovers • conduct/coordinate shift handovers • review and maintain procedures to support system improvements • maintain work area to meet housekeeping standards • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
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: • 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 : Grain and Edible Oil Processing Level III	
Unit of Competence	**Monitor the Implementation of Quality and Food Safety Programs**
Unit Code	**IND GOP3 04 0613**
Unit Descriptor	This unit of competency covers the skills and knowledge required to provide a leadership role in supporting day-to-day implementation of the food safety/quality programs in a work area. It also involves supporting others to implement the requirements of the food safety/quality procedures.

Element	Performance Criteria
1. Ensure others in the work area are able to meet quality and food safety requirements	1.1. Hazard control and clothing and equipment appropriate to work requirements are made available, functional and correctly fitted. 1.2. Information on ***food safety***/quality responsibilities and procedures is made current, accessible and communicated to others in the work area. 1.3. Information about identified hazards and the outcomes of risk assessment and risk control procedures is made accessible and communicated to others in the work area. 1.4. Food safety hazards and quality control measures are used in the work area can be identified by those in the work area. 1.5. Mentoring and coaching support is made available to support individuals/groups to implement quality and safe food handling procedures. 1.6. Training needs are identified and addressed within level of responsibility.
2. Monitor observance of quality standards and food safety programs in the work area	2.1. Work procedures in the work area are clearly defined, documented and followed. 2.2. Deviation from identified procedures is identified, reported and addressed within level of responsibility. 2.3. Personal behavior is made consistent with workplace policies and procedures that support food safety and quality. 2.4. Food safety hazards and/or quality are identified and reported according to workplace procedures. 2.5. Food safety and quality ***information*** are recorded to meet workplace reporting requirements.

	2.6. The work area is maintained according to housekeeping standards. 2.7. Work is conducted in accordance with workplace environmental guidelines.
3. Take corrective action in response to quality and food safety non-compliance	3.1. Workplace procedures are promptly implemented for responding to ***quality and food safety non-compliance***. 3.2. Hazardous events are investigated to identify cause. 3.3. Control measures are implemented to prevent recurrence and minimize risks of hazardous events.
4. Maintain and improve quality and food safety in the work area	4.1. Processes or conditions which could result in a breach of food safety procedures or quality specifications are identified, assessed, removed or land/reported within level of responsibility and according to workplace procedure. 4.2. Risk assessments are conducted and appropriate control measures are identified and implemented in the work area. 4.3. Recommendations arising from risk assessments are implemented within level of responsibility. 4.4. Inadequacies in control measures are identified and reported according to company reporting requirements. 4.5. Matters raised relating to quality/food safety are promptly resolved and/or referred to appropriate personnel. 4.6. The work group is consulted and advised of quality/food safety matters relevant to work role. 4.7. Opportunities for improving food safety and quality are identified and raised with relevant personnel. 4.8. Procedures are developed or revised to support effective control of quality and food safety hazards. 4.9. ***Quality/food safety records*** are reviewed to ensure they are complete and meet the ***quality system***, food safety program and legal requirements.

Variable	**Range**
Food safety program	May include but not limited to: • A food safety program is a written document that specifies how a business will control all food safety hazards that may be reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal

	requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures
Information	May include but not limited to: • food safety and quality policies and programs • Standard Operating Procedures (SOPs) • specifications • log sheets • written or verbal instruction incorporating food safety and quality requirements
Responsibility for identifying non-compliance against quality standards	May include but not limited to: • Responsibility for identifying non-compliance against quality standards occurs within the context of defined standards or specifications and relates to work area
Record keeping	May include but not limited to: • Record keeping complies with customer, legal and food safety program requirements
Quality systems	May include but not limited to: • Quality systems may be externally accredited, such as an ISO system, or internally designed and managed
Incidents	May include but not limited to: • a situation where the safe limits or parameters identified by the food safety program are not met A quality incident is: • a situation where the quality limits or parameters identified in specifications or processing instructions are not met
Monitoring	May include but not limited to: • taking temperatures • collecting samples • conducting visual inspections • additional testing as required
Responsibility for identifying breaches of food safety procedures	May include but not limited to: • and taking corrective action occurs in the context of the food safety program and within scope of responsibility
Personal hygiene requirements	May include but not limited to: • Minimum personal hygiene requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in the state or territory legislation/regulations
Reporting of health conditions and illnesses	• requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in state or territory legislation/regulations

Operator responsibilities	May include but not limited to: • The operator at this level may not have direct responsibility for overseeing the training/development of team members. At a minimum they must be able to identify development needs of others in the work area and refer this information to the relevant personnel. • The operator at this level may not have responsibility for independently assessing risks and determining the effectiveness of control measures. However, they would be expected to observe day-to-day effectiveness and participate in assessment and review processes. Responsibilities at this level may include facilitating consultation processes within level of responsibility

Evidence Guide	
Critical Aspects of Competence	A candidate must demonstrate the ability to: • describe quality and food safety program, risks and control measures of the work area • confirm that control measures are in place and that personnel in the work area are equipped and informed to implement programs • identify, address and follow up on non-compliances • identify causes of non-compliances • conduct risk assessments and recommend responsive action • provide support to others to implement the programs • Complete and maintain documentation.
Underpinning Knowledge	Demonstrate Knowledge of: • sources of information and expertise on procedures and responsibilities for food safety relevant to the workplace • principles of a HACCP-based approach to managing food safety, including identifying hazards that are likely to occur, establishing appropriate methods of control and confirming that controls are met • basic concepts of quality assurance including hazards, risk assessment and control methods • company programs and systems in place to manage and support quality and food safety in the workplace, which may involve separate or integrated programs, including systems for maintaining and updating documents, such as operating procedures and specifications • clothing and footwear requirements for working in and/or moving between food handling areas, including personal clothing maintenance, laundering and storage requirements

	• appropriate bandages and dressings to be used when undertaking food handling • housekeeping requirements and responsibilities relating to own work, where relevant this includes use and storage of housekeeping/cleaning equipment • procedures to follow in the event of pest sighting or discovery of infestation • purpose and importance of cleaning and sanitation procedures • legal obligations for food safety and quality, including an awareness of government legislation and customer requirements • food safety and quality responsibilities and requirements relating to the work area • awareness of common micro biological, physical and chemical hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences and control methods to prevent occurrence • suitable standard for materials, measuring devices, equipment and utensils used in the work area • properties of food and ingredients used that affect food safety, including an understanding of related storage, processing and handling requirements • current technical and process knowledge required to participate in investigations of food safety/quality hazards, risks and incidents within level of responsibility, including an understanding of common micro biological, physical and chemical hazards, related control methods and the way changes in equipment and/or processing methods can affect food safety and quality outcomes • procedures for identifying unsafe and/or non-conforming product, including control points and evidence of out-of-specification product or materials • sampling procedures, test methods and inspections • options for responding to non-compliance, including legal responsibility, risk management and cost/implications of different responses and level of responsibility for decision making • methods used in the workplace to isolate or quarantine food which may be unsafe • waste collection, recycling, handling and disposal, including handling/disposal requirements for different types of waste, such as hazardous waste where relevant

	• traceability and recall procedures within level of responsibility • documentation system and procedures, including record keeping to meet both company and legal requirements, procedures for developing and/or reviewing workplace procedures, and document control systems used in the workplace • auditing arrangements, roles and responsibilities as they relate to own work responsibilities, such as internal and external audit processes • appropriate communication skills and techniques to convey information on quality and food safety requirements to others in the workplace • cleaning and sanitation procedures where relevant • impact of rework handling/addition on food safety where relevant • sampling and test methods where relevant • facilitation and consultation techniques where relevant
Underpinning Skills	Demonstrate skills to: • access, interpret and communicate information about the food safety program, quality requirements and related procedures to others in the work area • demonstrate two-way communication, including active listening and responding constructively to feedback • provide access to and maintain current food safety/quality documentation • model safe food handling and quality practices and procedures to achieve required outcomes, including demonstrating: ➢ work procedures that meet the requirements of quality and food safety ➢ cleaning and sanitizing equipment ➢ sampling and testing as appropriate according to quality and food safety requirements ➢ maintaining personal hygiene ➢ wearing appropriate clothing and footwear as required by the work task ➢ following procedures when moving within and between work areas ➢ reporting health conditions and illnesses according to workplace procedures ➢ handling, cleaning and storing equipment, utensils and packaging materials as appropriate

	• identify control points in the work area and demonstrate monitoring techniques used (control points include critical, quality and regulatory control points) • support others to meet quality standards and follow food safety procedures by ensuring that all personnel in the work area receive the information required and have the necessary skills and equipment to carry out their responsibilities • identify, report and/or address food safety/quality non-compliance in an appropriate and timely manner within level of responsibility • determine when and how to make adjustments to maintain output within level of responsibility • identify, report and/or address food safety/quality training and development needs of others in the work area • ensure that appropriate and timely action is taken in response to non-compliance • handle and dispose of out-of-specification or contaminated food, waste and recyclable material according to food safety program as this requirement relates to own work responsibility • participate in investigations of non-compliance and risk assessment processes • participate in consultation processes to improve quality and food safety outcomes in the workplace • review practice and procedures to implement recommendations arising from risk assessments and/or improvement proposals within level of responsibility, such as collecting and analyzing food safety/quality records, reviewing operating procedures and communicating changes to others in the work area • ensure that housekeeping standards are maintained and that equipment is in operational order, such as participating in the management of equipment calibration • monitor the recording of quality and food safety information to confirm that records accurately reflect performance and meet the requirements of the food safety and quality programs • participate in food recall procedures as required, within level of responsibility • facilitate consultation processes according to enterprise procedures • lead investigations of quality and food safety incidents according to enterprise procedures

	• work cooperatively within a culturally diverse workforce
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Monitor Storage Facilities**
Unit Code	**IND GOP3 05 0613**
Unit Descriptor	This unit involves the skills and knowledge required to monitor storage facilities in accordance with workplace requirements including determining site functions and operations; monitoring storage operations in accordance with workplace procedures; and taking appropriate action in response to identified discrepancies, changes to storage requirements, or breaches in operational procedures.

Elements	Performance Criteria
1 Determine site functions and operations	1.1 Layout of storage facilities, work flow and activities are undertaken in each zone are identified. 1.2 Type of storage facilities, their purpose and (any) associated risk factors are identified. 1.3 ***Inventory*** lists are accessed through record management system. 1.4 ***Storage*** separations and co-storage applications are identified.
2 Monitor storage operations	2.1 Inventory data is confirmed to match goods/freight and applicable storage requirements. 2.2 Storage areas are supervised to ensure movement of personnel and goods/freight is in accordance with workplace procedures. 2.3 Storage facilities are checked to ensure appropriate operational capacity/ 2.4 Integrity of ***goods***/materials are monitored to ensure appropriate quality is maintained. 2.5 Discrepancies/changes are noted and action undertaken to storage requirements and/or inventory lists in accordance with workplace procedures. 2.6 Appropriate action(s) are initiated in response to breaches of operational procedures or to an emergency/incident. 2.7 Operational actions and investigative outcomes are documented in accordance with ***workplace*** procedures.

Variable	Range
Inventory systems	May include but not limited to: • automated • manual • paper-based • computerized • microfiche
Storage types	May include but not limited to: • bin/binning systems • rack refrigeration/freezers/cold rooms • marked floor space • containers • racks and racking systems • block/stacks • pallets
Goods	May include but not limited to: • special handling, location, storage and/or packaging requirements, including temperature controlled goods and dangerous goods
Workplaces	May include but not limited to: • large, medium or small worksites
Work	May include but not limited to: • restricted spaces • exposed conditions • controlled or open environments • environments involving the movement of equipment, goods, materials and/or vehicular traffic • by day or night
Customers	May include but not limited to: • internal or external
Requirements	May include but not limited to: • restricted spaces • site restrictions and procedures • use of safety and personal protective equipment • communications equipment • specialized lifting and/or handling equipment • incident/accident breakdown procedures • additional gear and equipment • noise restrictions • hours of operations • authorities and permits
Modes of transfer	May include but not limited to: • manual or motorized

Categories or groups of products/stock	May include but not limited to: • small parts • perishable goods • overseas export • dangerous goods • refrigerated products • temperature controlled stock • fragile goods
The characteristics of products/stock	May include but not limited to: • small parts • toxicity • flammability • form • weight • size • state • perish ability • fragility • security risk
Labeling systems	May include but not limited to: • batch code • bar code • identification numbering systems • serial numbers • symbols for safe handling • ADG and HAZCHEM Codes
Hazards in the work area	May include but not limited to: • hazardous or dangerous materials • contamination of, or from, materials being handled • noise, light, energy sources • stationary and moving machinery, parts or components • service lines • skills, leakages, ruptures • dust/vapors • oil or water on floor • a fire or explosion • damaged packaging or pallets • debris on floor • faulty racking • poorly stacked pallets • faulty equipment

Communication in the work area	May include but not limited to: • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF systems • oral, aural or signed communications
Workplace procedures	May include but not limited to: • company procedures • enterprise procedures • organizational procedures • established procedures
Personal protective equipment	May include but not limited to: • gloves • safety headwear and footwear • safety glasses • two-way radios and high visibility clothing
Consultative processes	May include but not limited to: • other employees and supervisors • suppliers, customers and clients • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists • other maintenance, professional or technical staff
Information/documents	May include but not limited to: • goods identification numbers and codes • manifests, picking slips, merchandise transfers, stock requisitions and bar codes • codes of practice and regulations relevant to workplace operations • Ethiopian and international regulations and codes of practice for the handling, stacking and transport of dangerous goods and hazardous substances • operations manuals, job specifications and induction documentation • manufacturers specifications for equipment • workplace procedures and policies • supplier and/or client instructions • dangerous goods declarations and material safety data sheets (where applicable) • award, enterprise bargaining agreement, other industrial arrangements

	• relevant Ethiopian standards and certification requirements • quality assurance and emergency procedures
Applicable regulations and legislation	May include but not limited to: • codes and regulations relevant to the monitoring of storage facilities • Ethiopian and international regulations and codes of practice for the storage of dangerous goods and hazardous substances, including: ➢ Ethiopian Dangerous Goods Code ➢ Ethiopian Explosives Code • license, patent or copyright arrangements • water and road use and license arrangements • export/import/quarantine/bond requirements • marine orders • relevant state/territory OHS and environmental protection legislation • workplace relations and workers compensation regulations

Evidence Guide	
Critical Aspects of Competence	The evidence required to demonstrate: • the underpinning knowledge and skills • relevant legislation and workplace procedures • other relevant aspects of the range statement
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • Ethiopian codes and regulations, permit and license requirements relevant to the workplace activities • Relevant OHS and environmental protection procedures and guidelines • Workplace procedures and policies relevant to the monitoring of storage facilities • Focus of operation of work systems, equipment, management and site operating systems • Information on various categories or groups of products including their key characteristics and hazards and the special handling, stacking and storage requirements for each • Types of storage areas and related equipment appropriate for different types of goods including perishable, fragile, dangerous, composition/state goods • Equipment applications, capacities, configurations, safety hazards and control mechanisms • Requirements for workplace documentation reports and records

	• Problems that may occur when monitoring storage facilities and appropriate action that can be taken • Site layout • Housekeeping standards and procedures required in the workplace
Underpinning Skills	Demonstrate skills to: • Communicate effectively with others when monitoring storage facilities • Read and interpret instructions, procedures, information and signs relevant to the monitoring of storage facilities • Complete documentation related to the monitoring of storage facilities • Work collaboratively with others when monitoring storage facilities • Adapt appropriately to cultural differences in the workplace, including modes of behavior and interactions with others • Promptly report and/or rectify any identified problems, faults or malfunctions when monitoring storage facilities in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unplanned events related to the monitoring of storage facilities • Apply precautions and required action to minimize, control or eliminate hazards that may exist during work activities • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Operate and adapt to differences in equipment in accordance with standard operating procedures • Use information on products and stock to determine, plan and organize processes used for the monitoring of storage facilities • Select and use relevant communications, computing and office equipment when monitoring storage facilities • Monitor performance of equipment • Select and use required personal protective equipment conforming to industry and OHS standards
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Apply Competitive Manufacturing Practices**
Unit Code	**IND GOP3 06 0613**
Unit Descriptor	This unit covers the skills needed to implement basic improvement practices within a competitive manufacturing organization. The unit focuses on bringing together the basic concepts and the holistic application of these basic concepts and processes to manufacturing. It would typically be carried out working as part of a team.

Elements	Performance Criteria
1. Focus on the basic competitive manufacturing concepts	1.1. ***Customers*** and their needs/requirements are identified. 1.2. Suppliers are identified. 1.3. Value contributions are identified along the chain. 1.4. Methods of increasing own contribution are identified and recommended to the value chain.
2. Improve the product/process value	2.1. Customer features/benefits are identified in the product. 2.2. Items which contribute to those features/benefits are identified. 2.3. Things which do not contribute to customer benefits/features are identified. 2.4. Methods of increasing features/benefits are recommended.
3. Use competitive manufacturing tools	3.1. Appropriate tools are selected for the job/process. 3.2. The ***tool*** is applied to the job/process. 3.3. The job/process is monitored and adjustments made to improve it in accordance with ***procedures***. 3.4. Own skill requirements are identified and skill development sought if required.

Variable	Range
Customer	May include but not limited to: • Customer may be interpreted to be an internal customer, but typically the benefits to the final customer should be used as the basis for the identification of waste. The operator does not need to interface directly with the external customer, but

	should be provided with sufficient information to enable them to identify customer benefits and features. • Supplier may be interpreted to be an internal supplier, but typically the external supplier and their abilities should be known. The operator does not need to interface directly with the external supplier, but should be provided with sufficient information to enable them to identify supplier abilities.
Tools	are used in this unit to mean the tools of competitive manufacturing such as 5S, 6 s , continuous improvement, cause effect diagrams
Procedures	May include but not limited to: • Procedures include all work instructions, standard operating procedures, formulas/recipes, batch sheets, temporary instructions and similar instructions provided for the smooth running of the plant. They may be written, verbal, computer based or in some other form. • For the purposes of this Training Package, 'procedures' also includes good operating practice as may be defined by industry codes of practice (e.g. Good Manufacturing Practice (GMP), Responsible Care) and government regulations.
Competitive manufacturing	May include but not limited to: • lean and agile manufacturing • preventative and predictive maintenance approaches • monitoring and data gathering systems such as Systems Control and Data Acquisition (SCADA)software, Enterprise Resource Planning (ERP)systems, Manufacturing Resource Planning (MRP), and proprietary systems such as SAP • statistical process control systems including six sigma and three sigma • Just In Time (JIT), kanban and other pull related manufacturing control systems • supply, value, and demand chain monitoring and analysis • other continuous improvement systems. • Competitive manufacturing should be interpreted so as to take into account the stage of implementation of competitive manufacturing approaches, the size of the enterprise, the work organization, culture, regulatory environment and manufacturing sector.

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge of: • There should be evidence of the individual's contribution to the value chain and willing application of competitive manufacturing to their job.

Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • the customers and the benefits they derive from the products • the suppliers and their capabilities • product waste • relevant tools for their job and how to apply them • factors impacting on the product, process and waste, particularly those wholly or partially under their control (and how to control them)
Underpinning Skills	Demonstrate skills of: • analysis • communication • planning • teamwork • problem solving
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Perform Basic Tests**
Unit Code	**IND GOP3 07 0613**
Unit Descriptor	This unit of competency covers the ability to perform tests and measurements using standard methods with access to readily available advice from supervisors.

Elements	Performance Criteria
1. Interpret test requirements	1.1. Test request is reviewed to identify samples to be tested, test method and equipment involved. 1.2. ***Hazards*** and ***enterprise controls*** associated with the sample, preparation methods, reagents and/or equipment are identified.
2. Prepare sample	2.1. Sample description is recorded, compared with specification, discrepancies are recorded and reported. 2.2. Sample is prepared in accordance with appropriate standard methods.
3. Check equipment before use	3.1. Test equipment is set up in accordance with test method. 3.2. Pre-use and safety checks are performed in accordance with enterprise procedures and manufacturer's instructions. 3.3. Faulty or unsafe equipment is identified and reported to appropriate personnel. 3.4. Calibration status of equipment is checked and any out of calibration items reported to appropriate personnel.
4. Perform tests on samples	4.1. Sample and standards to be tested are identified, prepared and weighed or measured. 4.2. Tests are conducted in accordance with enterprise procedures. 4.3. Data is recorded in accordance with enterprise procedures, 4.4. Calculations on data are performed as required. 4.5. Out of specification or atypical results are identified and reported promptly to appropriate personnel. 4.6. Equipment is shut down in accordance with operating procedures.
5. Maintain a safe work environment	5.1. Established safe work practices and personal protective equipment are used to ensure personal safety and that of other laboratory personnel.

	5.2. The generation of wastes and environmental impacts are minimized. 5.3. Safe disposal of laboratory and hazardous wastes is ensured. 5.4. Equipment and reagents are cleaned, cared for and stored as required.

Variable	Range
Hazards	May include but not limited to: • electric shock • biohazards, such as microbiological organisms and agents associated with soil, air, water, blood and blood products, and human or animal tissue and fluids • solar radiation, dust and noise • chemicals, such as Sulphuric acid, fluorides and hydrocarbons • aerosols • sharps, broken glassware and hand tools • flammable liquids • dry ice and liquid nitrogen • fluids under pressure • sources of ignition • occupational overuse syndrome, slips, trips and falls • manual handling, working at heights and working in confined spaces • crushing, entanglement and cuts associated with moving machinery or falling objects
Enterprise controls to address hazards	May include but not limited to: • use of MSDS • use of signage, barriers and service isolation tags • use of personal protective equipment, such as hard hats, hearing protection, sunscreen lotion, gloves, safety glasses, goggles, face guards, coveralls, gowns, body suits, respirators and safety boots • use of appropriate equipment, such as biohazard containers and cabinets and laminar flow cabinets • recognizing and observing hazard warnings and safety signs • labeling of samples, reagents, aliquot samples and hazardous materials • handling and storage of all hazardous materials and equipment in accordance with labeling, MSDS and manufacturer's instructions, and enterprise procedures and regulations • cleaning and decontaminating equipment and work areas regularly using recommended procedures

	• following established manual handling procedures for tasks involving manual handling
Codes of practice	May include but not limited to: • Where reference is made to industry codes of practice, and/or Ethiopian/international standards, it is expected the latest version will be used
Standards**,** codes**,** procedures and**/**or enterprise requirements	May include but not limited to: • Ethiopian and international standards, • calibration and maintenance schedules • enterprise recording and reporting procedures • equipment manuals • equipment startup, operation and shutdown procedures • MSDS and safety procedures • material, production and product specifications • national measurement regulations and guidelines • principles of Good Laboratory Practice (GLP)l • production and laboratory schedules • quality manuals • Standard Operating Procedures (SOPs)
Concepts of metrology	May include but not limited to: • that all measurements are estimates • measurements belong to a population of measurements of the measured parameters • repeatability • precision • accuracy • significant figures • sources of error • uncertainty • traceability
Preparation of samples	May include but not limited to: • sub-sampling or splitting using procedures, such as riffling, coning and quartering, manual and mechanical splitters • diluting samples • physical treatments, such as ashing, dissolving, filtration, sieving, centrifugation and comminution • molding, casting or cutting specimens
Typical tests carried out by laboratory**/**field assistants	May include but not limited to: • visual/optical tests of appearance, color, texture, identity, turbidity, refractive index (alcohol content and Baume/Brix) • physical tests: ➢ density, specific gravity and compacted density ➢ moisture content and water activity

	➢ particle size, particle shape and size distribution • chemical tests: ➢ gravimetric ➢ colorimetric ➢ Electrical Conductivity (EC) and pH ➢ specific ions using dipsticks and kits ➢ nutrients (e.g. nitrates and orthophosphates) using basic kits ➢ ashes, including Sulphated ashes • biological/environmental tests: ➢ pH, Oxygen Reduction Potential (ORP), dissolved oxygen (DO) and (EC) ➢ E coli using test kits ➢ surface hygiene/presence of microbes • packaging tests: ➢ tearing resistance, bursting strength and impact resistance ➢ permeability and/or leakage • mechanical tests: ➢ Emerson class and concrete slump
Measurements	May include but not limited to: • simple ground surveys • meteorological parameters, such as wind direction/strength, rainfall, maximum/minimum temperature, humidity and solar radiation • simple background radiation survey • production/process parameters, such as temperature, flow and pressure • gas levels in a confined space
Common measuring equipment	May include but not limited to: • dimension apparatus • DO and EC • analogue and digital meters and charts/recorders • basic chemical and biological test kits • dipsticks and site test kits (e.g. HACK) • timing devices • temperature measuring devices, such as thermometers and thermocouples
Minimizing environmental impacts	May include but not limited to: • recycling of non-hazardous waste, such as chemicals, batteries, plastic, metals and glass • appropriate disposal of hazardous waste • correct disposal of excess sample/test material • correct storage and handling of hazardous chemicals

Occupational Health and Safety (OHS) and environmental management requirements	May include but not limited to: • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge of: • accurately interpret enterprise procedures or standard methods • complete all tests within the required timeline without sacrificing safety, accuracy or quality • demonstrate close attention to the accuracy and precision of measurements and the data obtained • Maintain the security, integrity and traceability of all samples, data/results and documentation.
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • concepts of metrology • the international system of units (SI) • purpose of test • principles of the standard method • pre-use equipment checks • relevant standards/specifications and their interpretation • sources of uncertainty in measurement and methods for control • enterprise and/or legal traceability requirements • interpretation and recording of test result, including simple calculations • procedures for recognition/reporting of unexpected or unusual results • relevant health, safety and environment requirements
Underpinning Skills	Demonstrate skills to: • interpreting enterprise procedure or standard methods accurately • using safety information, such as Material Safety Data Sheets (MSDS) and performing procedures safely • checking test equipment before use • completing all tests within required timeline without sacrificing safety, accuracy or quality • calculating, recording and presenting results accurately and legibly

	• maintaining security, integrity and traceability of all samples, data/results and documentation • cleaning and maintaining equipment
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Apply Raw Materials, Ingredient and Process Knowledge to Production Problems**
Unit Code	**IND GOP3 08 0613**
Unit Descriptor	This unit of competency covers skills and knowledge required to apply knowledge of ingredients and processes to troubleshoot typical problems that occur in preparing, processing and/or packaging product. This unit applies where problem solving occurs over one or more processes and requires an understanding of the characteristics of raw materials and ingredients and processing methods used. It typically applies to the production operator where responsibility for solving problems relating to non-conforming raw materials, ingredients and processes.

Elements	Performance Criteria
1. Identify and respond to non-conforming ingredients/raw materials	1.1. Non-conformance in raw ***materials/ingredients*** is identified and reported according to workplace reporting requirements. 1.2. Causes of non-conformance are investigated and reported according to workplace reporting requirements. 1.3. Corrective action is determined and implemented within level of responsibility and workplace procedures. 1.4. Action is taken to prevent recurrence of non-conformance. 1.5. Action is reported according to workplace reporting requirements.
2. Identify and respond to non-conforming product and processes	2.1. Processing parameters, stages and changes which occur during processing are monitored. 2.2. Non-conformance in processing, handling and/or storage is identified and corrective action taken according to workplace requirements. 2.3. Causes of non-conformance relating to processing, handling and/or storage are investigated and reported according to workplace reporting requirements. 2.4. Corrective action is determined and implemented within level of responsibility and workplace ***procedures.*** 2.5. Action is taken to prevent recurrence of non-conformance. 2.6. Action is reported according to workplace reporting ***requirements***.

	2.7. Work is conducted in accordance with workplace environmental guidelines.

Variable	Range
Ingredients**/**raw materials	May include but not limited to: • Ingredients/raw materials are those used to manufacture product
Procedures	May include but not limited to: • Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements.
Requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: • the Food Standards Code, including labeling, weights and measures legislation • legislation covering food safety, environmental management, Occupational Health and Safety (OHS) , anti-discrimination and equal opportunity
Typical processing and related techniques	May include but not limited to: • raw materials/ingredient dispensing • preparation • mixing and blending • conditioning • primary and further processing • wrapping • packing and storage
Typical process parameters	May include but not limited to: • temperature • time • pressure and flow rate
Typical reactions	Typical reactions depend on processing method. Examples include but are not limited to: • gelatinization and hydration
Problem minimization	Where recurrence of a problem cannot be prevented, procedures should be established to minimize the likelihood of recurrence and to identify any further incidents

Evidence Guide	
Critical Aspects of Competence	Must demonstrate ability to: • describe required quality characteristics for raw materials and ingredients • describe required processes to achieve production specifications

	• identify common non-conforming materials and ingredients and causes • identify common non-conforming processes and causes • determine and undertake corrective action for non-conformances • complete workplace documentation and report non-conformances • apply food safety procedures
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • basic composition and function of each main raw material/ingredient used, such as awareness of ingredient grades or types • common causes of contamination/unacceptable quality of raw materials/ ingredients • methods used to confirm quality standard, such as accessing information (e.g. certificates of analysis and/or laboratory clearance information) • the effect of variation in raw materials/ingredients on processing stages and final product outcome, including factors likely to cause variation, and scope to adjust or correct for variation at each processing stage • appropriate handling and storage requirements for raw materials/ingredients and final product, and the effect of failing to meet required storage conditions • the changes and reactions that occur through processing stages, including the signs and symptoms of poor/unacceptable processing or equipment operation • factors that affect the shelf-life of product • the inter-relationships between processing stages and the effect of variation in processing parameters on process outcome and on final product, including factors likely to cause variation, and scope to adjust or correct for variation at subsequent process stages • procedures for identifying and isolating non-conforming product • troubleshooting information and techniques • procedures and related documentation required to amend or introduce a new method or procedure, such as short term procedures for amending or updating specifications and processing parameters • reporting requirements and responsibilities • test methods to confirm raw material/ingredient and/or final product quality characteristics where relevant

Underpinning Skills	Must demonstrates *a*bility to: • identify requirements of ingredient/raw material characteristics within level of responsibility • follow procedures to identify, remove/isolate and report non-conforming ingredients/materials and/or product according to workplace reporting requirements • determine likely causes of non-conformance of ingredients/raw materials • recognize indicators of unacceptable or non-conforming processing, handling and/or storage outcomes • act promptly to identify, remove/isolate and report non-conforming product and/or processes • access and apply workplace information relating to process troubleshooting • investigate non-conformance to determine likely causes and report findings to appropriate personnel • identify action required to correct non-conformance and implement within level of responsibility • identify action required to prevent or minimize and control recurrence of non-conformance and implement within level of responsibility • complete workplace records, including reporting non-conformance and documenting corrective actions according to workplace recording procedures • conduct tests to confirm raw material/ingredient and/or final product quality characteristics according to enterprise procedures • use oral communication skills/language competence to fulfill the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Monitor and Handle By-Product Storages**
Unit Code	**IND GOP3 09 0613**
Unit Descriptor	This unit covers monitoring and preparing by-product storages, surrounding areas and equipment in readiness for receiving by-products at an acceptable level of hygiene, and defines the standard required to: prepare the storage area for access by carriers; comply with Occupational Health and Safety (OHS) requirements for working in confined spaces; prepare by-product storages by removing all residues and checking structures; erect simple temporary bulk material storages;

Elements	Performance Criteria
1. Ensure others in the work area are able to meet safety requirements	1.1. Hazard control and clothing and equipment appropriate to ***work*** requirements are made available, functional and correctly fitted. 1.3. Information about identified hazards and the outcomes of risk assessment and risk control procedures is made accessible and communicated to others in the work area. 1.5. Mentoring and coaching support is made available to support individuals/groups to implement quality and safe food handling procedures. 1.6. Training needs are identified and addressed within level of responsibility.
2. monitor the preparation of by-product storage area	2.1 Ensure storage site is cleaned of weeds, dust and spillage to organization requirements. 2.2 Site is maintained in a clean and tidy condition according to organizational requirements. 2.3 ***Storage site*** is prepared to meet OHS standards.

Variable	Range
Work	In a range of work environments such as: • restricted spaces • exposed conditions • controlled or open environments • environments involving the movement of equipment, goods, materials and/or vehicular traffic • by day or night

Storage site	May include but not limited to: • permanent and/or temporary storages • the surrounding areas • Entry, exit and site roads.
By-product	May include but not limited to: • By-product may include • Bran • Grain germ • Oilcake • Gum/soap materials
Requirements for work	May include but not limited to: • restricted spaces • site restrictions and procedures • use of safety and personal protective equipment • communications equipment • specialized lifting and/or handling equipment • incident/accident breakdown procedures • additional gear and equipment • noise restrictions • hours of operations • authorities and permits
Modes of transfer	May include but not limited to: • manual or motorized
Inventory systems	May include but not limited to: • automated • manual • paper-based • computerized • microfiche
Storage types	May include but not limited to: • rack refrigeration/freezers/cold rooms • marked floor space • containers • racks and racking systems • block/stacks • pallets
Categories or groups of products/stock	May include but not limited to: • small parts • perishable goods • overseas export • dangerous goods • refrigerated products • temperature controlled stock and fragile goods

Labeling systems	May include but not limited to: • batch code • bar code • identification numbering systems • serial numbers • symbols for safe handling • ADG and HAZCHEM Codes
Target user groups	May include but not limited to: • stock feed manufacturers • oil extractors • soap & detergent manufacturers
Hazards in the work	May include but not limited to: • hazardous or dangerous materials • contamination of, or from, materials being handled • noise, light, energy sources • stationary and moving machinery, parts or components • service lines • skills, leakages, ruptures • dust/vapors • oil or water on floor • a fire or explosion • damaged packaging or pallets • debris on floor • faulty racking • poorly stacked pallets • faulty equipment
Communication in the work area	May include but not limited to: • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF systems • oral, aural or signed communications
Workplace procedures	May include but not limited to: • company procedures • enterprise procedures • organizational procedures • established procedures
Personal protective equipment	May include but not limited to: • gloves • safety headwear and footwear • safety glasses

	• two-way radios • high visibility clothing
Information/documents	May include but not limited to: • goods identification numbers and codes • manifests, picking slips, merchandise transfers, stock requisitions and bar codes • codes of practice and regulations relevant to workplace operations • Ethiopian and international regulations and codes of practice for the handling, stacking and transport of dangerous goods and hazardous substances • operations manuals, job specifications and induction documentation • manufacturers specifications for equipment • workplace procedures and policies • supplier and/or client instructions • dangerous goods declarations and material safety data sheets (where applicable) • award, enterprise bargaining agreement, other industrial arrangements • relevant Ethiopian standards and certification requirements • quality assurance and emergency procedures
Applicable regulations and legislation	May include but not limited to: • codes and regulations relevant to the monitoring of storage facilities • Ethiopian and international regulations and codes of practice for the storage of dangerous goods and hazardous substances, including: ➢ Ethiopian Dangerous Goods Code ➢ Ethiopian Explosives Code • license, patent or copyright arrangements • water and road use and license arrangements • export/import/quarantine/bond requirements • marine orders • relevant state/territory OHS and environmental protection legislation • workplace relations & workers compensation regulations
By-product	May include but not limited to: • By-product may include • Bran • Grain germ • Oilcake and Gum/soap materials

Requirements for work	May include but not limited to: • restricted spaces • site restrictions and procedures • use of safety and personal protective equipment • communications equipment • specialized lifting and/or handling equipment • incident/accident breakdown procedures • additional gear and equipment • noise restrictions • hours of operations • authorities and permits

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge to: • prepare the by-product storage area for access by carriers • comply with OHS requirements for working in confined spaces • prepare by-product storages by removing all residues and checking structure • erect simple temporary by-product storages • prepare and test by-product handling machinery • Perform routine safety, service and maintenance procedures on tools, equipment and machinery.
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • range of construction methods, potential hazards, safety and structural requirements for storage • erection/dismantling for types of temporary storage used by organization • organization and commodity quality requirements for by-product storage • organization hygiene requirements • typical signs of structural damage to be documented and reported • pre-operational and safety checks for tools and equipment • machinery operating principles and operating methods • machinery storage and protection methods • cleaning and storage of machinery, equipment and materials • environmental impacts associated with the operation of machinery and equipment • appropriate action in contingency situations

	• organization requirements for protective equipment and safe practices in relation to OHS • potential hazards associated with the operation of basic tools and equipment • relevant legislation, regulations and codes of practice with regard to workplace OHS, environment and the use and control of machinery and equipment • appropriate legislative requirements, manufacturer's instructions and organization procedures/ instructions • personal protective clothing and equipment and when and how it should be used • Organizational recording and reporting procedures.
Underpinning Skills	Demonstrate skills to: • identify hazards and follow safe work procedures • erect simple temporary by-product storages • check equipment and storage facilities, and identify current or impending faults • handle and man oeuvre equipment • complete pre-operational checks on basic tools and equipment • operate hand and independently powered tools and cleaning equipment to industry standards • clean, secure and store machinery and equipment • perform basic trouble shooting • recognize and rectify minor operational faults • handle hazardous substances (fuels) safely • work in confined spaces • use communication systems • Interpret and apply task instructions, communicate with work team and supervisor, and record and report faults, workplace hazards and accidents. • Read and interpret manufacturer's specifications, work and maintenance plans, and Material Safety Data Sheets.
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Identify Equipment Faults**
Unit Code	**IND GOP3 10 0613**
Unit Descriptor	This unit requires the application of planning, technical knowledge and skills to check and isolate routine and non-routine equipment faults used in production and report on the status of equipment. It applies to all sectors of the industry. This competency is typically performed by operators demonstrating some relevant theoretical knowledge and using a range of well-developed skills requiring some discretion and judgment

Elements	Performance Criteria
1. Identify scope of operational check.	1.1 Equipment components and operating systems are identified and classified. 1.2 Appropriate tests and procedures are matched to the ***equipment*** operating systems. 1.3 Special test procedures and parameters are identified in manufacturer's specifications and ***procedures***. 1.4 The operating principles of hydraulic, pneumatic, mechanical and electrical/electronic systems are explained as related to workplace equipment. 1.5 Measures are implemented to control identified ***hazards*** in line with procedures and duty of care. 1.6 Checks on the physical condition of equipment are observed and undertaken as per procedures. 1.7 Preliminary observations are recorded. 1.8 Test procedures are discussed with appropriate personnel and necessary permission obtained where required.
2. Plan operational checks.	2.1 Specifications and notes are checked from preliminary observations and areas to be clarified identified. 2.2 Testing sequence/s noting areas is/are planned where results and observations should be recorded. 2.3 Safe area is identified for testing. 2.4 Arrangements are made for any additional resources (including other employees).
3. Check unit through full operational range.	3.1 Testing, observing relevant safety and operational requirements are undertaken. 3.2 Results and findings are confirmed.

4. Identify fault and/or formulate recommendations.	4.1 Impact of fault on work schedule is identified. 4.2 ***Data*** proposals for equipment repair are ***recorded*** based on faults found, cost/time implications and workplace approval systems. 4.3 Report is explained to relevant workplace personnel including any options and recommendations. 4.4 Repairs are undertaken where appropriate in accordance with procedures.

Variable	**Range**
Tools and equipment	May include but not limited to: • hand tools specific for the task • product testing equipment (e.g. flow meter, scales, tape measure, micrometer, caliper, ultrasonic thickness) • machinery measuring equipment (e.g. vibration meter, tachometer, current tester, thermal imaging, temperature gauge) • Measuring and aligning equipment.
Procedures	May include but not limited to: • Procedures mean all relevant workplace procedures, work instructions, temporary instructions, standard operating procedures, plant description manuals, manufacturer's instructions, specifications, service manuals, machine circuit diagrams for hydraulic/pneumatic and electrical/electronic circuits and relevant industry and government codes and standards
Hazards	May include but not limited to: • rotating and moving machinery • process materials, solids, fluids and gases under pressure or flowing • temporary connections or by-passes • electrical, hydraulic or pneumatic energy sources • Out-of-specification operation
Data and Records	May include but not limited to: • plant data • log sheets • operational and performance reports • physical aspects such as noise, smell, feel and pressure condition monitoring information • planned maintenance schedules • Procedures.

Problems	May include but not limited to: • out-of-specification product or variations • response of equipment to materials variations • new or changed materials • changed equipment settings (e.g. higher speed or throughput) • equipment in need of maintenance • Procedures requiring update or modification.

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge of: • understand the procedures and know the importance of critical operational systems • Recognize potential situations requiring action and then implement appropriate action. • Consistent performance should be demonstrated. For example, look to see that: ➢ early warning signs of equipment in need of attention/with potential problems are recognized ➢ appropriate tests are undertaken and tests are analyzed appropriately ➢ proposals for equipment repair are based upon the most appropriate and cost effective method to return equipment to full performance in a timely manner ➢ items initiated are followed through until final resolution has occurred
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • principles of the operation of the equipment to be maintained • functions and troubleshooting of internal components and their problems • routine and non-routine causes of equipment failures and the service conditions which may increase maintenance • maintenance techniques, (e.g. reactive maintenance, predictive and preventative operational maintenance) • appropriate testing procedures and use of equipment for a range of equipment faults • operating principles for mechanical, hydraulic, pneumatic, electrical/electronic systems • urgency and timeliness factors in planning maintenance activities in relation to production requirements • Collection, analysis and reporting of data.
Underpinning Skills	Demonstrate skills to: • conduct inspections, checks and tests on equipment as appropriate

	• read and interpret circuit diagrams for mechanical, hydraulic, pneumatic and electrical/electronic operating systems • use technical information and manufacturer information to locate relevant data • interpret technical specifications and manufacturer instructions • ensure workplace is safe for testing and maintenance of equipment • identify hazards of the materials and process • implement appropriate procedures for hazard control • use PPE, safely handle products and materials, read relevant safety information • Apply safety precautions appropriate to the task.
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Work Safely With Industrial Chemicals and Materials**
Unit Code	**IND GOP3 11 0613**
Unit Descriptor	This unit covers using Personal Protective Equipment (PPEs), identifying the particular hazards and emergency procedures, and observing safe working practices in that environment.

Elements	Performance Criteria
1. Use personal protective equipment	1.1. Correct and appropriate safety clothing including ***personal protective equipment*** is selected and used correctly based on information in relevant Material Safety Data Sheet (MSDS).
2. Identify emergency procedures	2.1. Emergency procedures and plan relevant to the particular work environment are documented, understood and demonstrated as laid down in approved safety instructions.
3. Observe safe working practices	3.1. Hazardous areas and materials are identified and special handling procedures are identified and understood. 3.2. Permits to work (if necessary) are obtained. 3.3. All equipment and hazardous materials are used in accordance with relevant OHS legislation, manufacturers' instructions and standard operating procedures. 3.4. All site-specific safety policies, safety signs, symbols and labels are correctly identified and understood. 3.5. Material safety data sheets are understood and applied. 3.6. Safe manual handling procedures (including equipment) are used. 3.7. Chemicals and storage are decanted to ***state/territory*** dangerous goods and OHS legislation and requirements. 3.8. Housekeeping duties are performed according to standard operating procedures to maintain a safe working environment.

Variable	Range
Personal protective equipment	May include but not limited to: • goggles/face shields • respirators • air supplied or self-contained helmets • safety boots, gloves and appropriate clothes/garments

State or Territory	Appropriate OHS, dangerous goods acts and regulations, National standards, national dangerous goods transport codes and codes of practice
Safe working practices	May include but not limited to: • Environment is inspected • Hazards (and chemical reactive hazards) are assessed and controlled using hierarchy of hazard control • Properly maintained PPE is available • Emergency management plan is documented/understood • Work to be undertaken in safe 'thermal' environments and all possible ignition sources are to be identified and controlled
Storage	All storage containers (minor quantities and in consumer packages) are suitable for chemical exposure and are properly labeled and/or placarded. Chemical manifests are updated at completion of work activity

Evidence Guide	
Critical Aspects of Competence	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • dangerous goods classification and labeling/pleading • testing, use and maintenance of PPE • inherent hazardous properties of the chemicals to be used • interpretation of the relevant MSDS • basic firefighting procedures • site-specific emergency plan procedures • chemical spill confinement procedures • dangerous occurrence (near miss) reporting procedures • hierarchy of control
Underpinning Skills	• undertaking risk assessment • communicating with others • performing proper manual handling techniques • interpreting safety signage, labeling and pleading
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Use Numerical Applications in the Workplace**
Unit Code	**IND GOP3 12 0613**
Unit Descriptor	This is unit of competency covers the skills and knowledge required to apply basic mathematical functions of addition, subtraction, multiplication and division to undertake workplace calculations or to estimate approximate answers when exact calculations are not required.

Elements	Performance Criteria
1. Apply basic mathematical concepts to calculate workplace information	1.1. ***Calculation*** requirements are identified and appropriate method is selected. 1.2. Data is obtained from relevant sources and interpreted correctly. 1.3. Calculations are undertaken using addition, subtraction, multiplication and division to support work role.
2. Apply basic mathematical concepts to estimate workplace information	2.1. ***Estimation*** requirements are identified and appropriate estimation method is selected. 2.2. Data is obtained from relevant sources and interpreted correctly. 2.3. Estimations are made to meet work requirements.

Variable	Range
Calculations	May include but not limited to: • the use of whole numbers, decimals, fractions and percentages • manually or using calculators and other measuring instruments as appropriate to the task
Estimations	May include but not limited to: • observations of other amounts or measurements • supplied data, such as volume or weight information on packaging of raw materials
Numerical information	May include but not limited to: • simple run charts and graphs

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge to: • identify calculation or estimation requirements • carry out calculations involving basic addition, subtraction, division and multiplication

	• where estimations are used, estimated amounts must be consistent with process or product specification and demonstrate knowledge of measurement units used in the workplace • Use estimation techniques to check calculated results and workplace data.
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • mathematical processes, including addition, subtraction, multiplication and division • application of calculation and estimation techniques to meet work requirements • units of measurement used in the workplace, including whole numbers, fractions and decimals (to one decimal point) (this may include use of conversion charts) • representation of numerical information relevant to work requirements, such as charts, graphs and tables • recording requirements and responsibilities where relevant
Underpinning Skills	Demonstrate skills to: • identify whether a calculation or estimation is required to meet workplace requirements • carry out calculations involving basic addition, subtraction, division and multiplication to support work role (this may involve use of a calculator and conversion tables where required) • use estimation techniques to check quantities, ratios, speed and other required data estimates • use estimation techniques to check calculated results and workplace data • record calculations and measurement information accurately according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organization, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Apply First Aid**
Unit Code	**IND GOP3 13 0613**
Unit Descriptor	This unit of competency describes the skills and knowledge required to provide first aid response, life support, management of casualty(s), the incident and other first aiders, until the arrival of medical or other assistance

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

	2.10 ***Casualty's condition*** is monitored and responded in accordance with effective first aid principles and procedures. 2.11 Casualty management is finalized according to casualty's needs and first aid principles.
3. Communicate details of the incident	3.1 Ambulance support and/or appropriate medical assistance are requested according to relevant circumstances using relevant ***communication media and equipment***. 3.2 Assessment of casualty's condition and management activities is accurately conveyed to ambulance services /other emergency services/relieving personnel. 3.3 Reports are prepared as appropriate in a timely manner, presenting all relevant facts according to established procedures. 3.4 Details of casualty's physical condition, changes in conditions, management and response to management are accurately recorded in line with the established procedures. 3.5 Confidentiality of records and information is maintained in line with privacy principles and statutory and/or organization policies.
4. Evaluate own performance	4.1 Feedback is sought from ***appropriate clinical expert***. 4.2 The possible psychological impacts on rescuers of involvement in critical incidents are recognized. 4.3 Participate in debriefing/evaluation as appropriate to improve future response and address individual needs.

Variable	**Range**
A hazard	May include but not limited to: • A source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these
Hazards	May include but not limited to: • Physical hazards • Biological hazards • Chemical hazards • Hazards associated with manual handling
Risks	May include but not limited to: • Risks from equipment, machinery and substances • Risks from first aid equipment • Environmental risks • Exposure to blood and other body substances

	• Risk of further injury to the casualty • Risks associated with the proximity of other workers and bystanders • Risks from vehicles
Resources and equipment are used appropriately	May include but not limited to: • AED • First aid kit • Auto-injector • Puffer/inhaler • Resuscitation mask or barrier • Spacer device
First aid management	The setting in which first aid is provided, including: • workplace policies and procedures • industry/site specific regulations, codes etc. • OHS requirements • state and territory workplace health and safety legislative requirements • location and nature of the incident • situational risks associated with, for example, electrical and biological hazards, weather, motor vehicle accidents • location of emergency services personnel • The use and availability of first aid equipment and resources • Infection control • Legal and social responsibilities of first aider
Established first aid principles	May include but not limited to: • Preserve life • Prevent illness, injury and condition(s) becoming worse • Promote recovery • Protect the unconscious casualty
Casualty's condition	May include but not limited to: • Abdominal injuries • Airway obstruction • Allergic reactions • Altered and loss of consciousness • Bleeding • Burns - thermal, chemical, friction, electrical • Chest pain/cardiac arrest • Injuries: cold and crush injuries; eye and ear injuries; head, neck and spinal injuries; minor skin injuries; needle stick injuries; soft tissue injuries including sprains, strains, dislocations • Near drowning • Envenomation - snake, spider, insect and marine bites

	• Environmental conditions such as hypothermia, hyperthermia, dehydration, heat stroke • Fractures • Medical conditions, including cardiac conditions, epilepsy, diabetes, asthma and other respiratory conditions • No signs of life • Poisoning and toxic substances (including chemical contamination) • Respiratory distress/arrest • Seizures • Shock • Stroke • Substance misuse - common drugs and alcohol, including illicit drugs.
Communication media and equipment	May include but not limited to: • Telephones, including landline, mobile and satellite phones • HF/VHF radio • Flags • Flares • Two way radio • Email • Electronic equipment • Hand signals
Appropriate clinical expert	May include but not limited to: • Supervisor/manager • Ambulance officer/paramedic • Other medical/health worker
Vital signs	May include but not limited to: • Consciousness • Breathing • Circulation
Documentation	May include but not limited to: • Injury report forms • Workplace documents as per organization requirements • Time • Location • Description of injury • First aid management • Fluid intake/output, including fluid loss via: ➢ blood ➢ vomit ➢ faces ➢ urine

	• Administration of medication including: ➢ time ➢ date ➢ person administering ➢ dose ➢ Vital signs

Evidence Guide	
Critical Aspects of Competence	Demonstrate skills and knowledge of: • The individual being assessed must provide evidence of specified essential knowledge as well as skills • Competence should be demonstrated working individually and, where appropriate, as part of a first aid team • Consistency of performance should be demonstrated over the required range of situations relevant to the workplace or community setting • Currency of first aid knowledge and skills is to be demonstrated in line with State/Territory regulations, legislation and policies, and industry guidelines
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • National Guidelines relating to provision of first aid as outlined • Awareness of stress management techniques and available support • First aid management of: • abdominal injuries • allergic reactions • altered and loss of consciousness • bleeding • burns - thermal, chemical, friction, electrical • cardiac arrest • casualty with no signs of life • chest pain • choking/airway obstruction • injuries: cold and crush injuries; eye and ear injuries; head, neck and spinal injuries; minor skin injuries; needle stick injuries; soft tissue injuries including sprains, strains, dislocations • envenomation - snake, spider, insect and marine bites • environmental impact such as hypothermia, hyperthermia, dehydration, heat stroke • fractures • medical conditions, including cardiac conditions, epilepsy, diabetes, asthma and other respiratory conditions

	• near drowning • poisoning and toxic substances (including chemical contamination) • respiratory distress • seizures • shock • stroke • substance misuse - common drugs and alcohol, including illicit drugs Social/legal issues: • duty of care • need to be culturally aware, sensitive and respectful • importance of debriefing • confidentiality • own skills and limitations • Understanding of the use of an Automated External Defibrillator (AED), including when to use and when not to • basic occupational health and safety requirements in the provision of first aid • basic principles and concepts underlying the practice of first aid • chain of survival • first aiders' skills and limitations • infection control principles and procedures, including use of standard precautions • priorities of management in first aid when dealing with life threatening conditions • procedures for dealing with major and minor injury and illness
Underpinning Skills	Demonstrate Skills of: • Administer medication in line with state/territory regulations, legislation and policies • Apply first aid principles • Call an ambulance and/or medical assistance according to relevant circumstances and report casualty's condition • Communicate effectively and assertively in an incident • Conduct an initial casualty assessment • Demonstrate correct procedures for performing CPR using a manikin, including standard precautions • ability to call an ambulance • consideration of the welfare of the casualty • safe manual handling • site management to prevent further injury • Evaluate own response and identify appropriate improvements where required

	• Follow OHS guidelines • Infection control, including use of standard precautions • Make prompt and appropriate decisions relating to managing an incident in the workplace • Plan an appropriate first aid response in line with established first aid principles, policies and procedures, ARC Guidelines and/or State/Territory regulations, legislation and policies and industry requirements and respond appropriately to contingencies in line with own skills • Prepare a written incident report or provide information to enable preparation of an incident report • Provide assistance with self-medication as per subject's own medication regime and in line with State/Territory legislation, regulations and policies and any available medical/pharmaceutical instructions • Use literacy and numeracy skills as required to read, interpret and apply guidelines and protocols
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Monitor Implementation of Work plan/Activities**
Unit Code	**IND GOP3 14 0613**
Unit Descriptor	This unit covers competence required to oversee and monitor the quality of work operations within an enterprise. This unit may be carried out by team leaders or supervisors.

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

	4.4 Where problem is raised by a team member, they are encouraged to participate in solving the problem. 4.5 Follow up action is taken to monitor the effectiveness of solutions in the workplace.

Variables	**Range**
Problems	May include but not limited to: • difficult customer service situations • equipment breakdown/technical failure • delays and time difficulties • competence
Workplace records	May include but is not limited to: • staff records and regular performance reports

Evidence Guide	
Critical Aspects of Competence	Assessment must confirm appropriate knowledge and skills to: • ability to effectively monitor and respond to a range of common operational and service issues in the workplace • understanding of the role of staff involved in workplace monitoring • knowledge of quality assurance, principles of workflow planning, delegation and problem solving
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • roles and responsibilities in monitoring work operations • overview of leadership and management responsibilities • principles of work planning and principles of delegation • typical work organization methods appropriate to the sector • quality assurance principles and time management • problem solving and decision making processes • industrial and/or legislative issues which affect short term work organization as appropriate to industry sector
Underpinning Skills	Demonstrate skills of: • monitoring and improving workplace operations • planning and organizing workflow • maintaining workplace records
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Apply Quality Control**
Unit Code	**IND GOP3 15 0613**
Unit Descriptor	This unit covers the knowledge, attitudes and skills required in applying quality control in manufacturing works.

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

Variable	Range
Quality check	• Check against design / specifications • Visual inspection and Physical inspection
Quality standards	• materials • components • process • procedures
Quality parameters	• standard design / specifications • material specification

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate to: • Check completed work continuously against organization standard • Identify and isolate faulty or poor service • Check service deliver against organization standards • Identify and apply corrective actions on the causes of identified faults or error • Record basic information regarding quality performance • Investigate causes of deviations of services against standard • Recommend suitable preventive actions
Underpinning Knowledge	Demonstrates knowledge of: • Relevant quality standards, policies and procedures • Characteristics of services • Safety environment aspects of service processes • Evaluation techniques and quality checking procedures • Workplace procedures and reporting procedures
Underpinning Skills	Demonstrates skills to: • interpret work instructions, specifications and standards appropriate to the required work or service • carry out relevant performance evaluation • maintain accurate work records • meet work specifications and requirements • communicate effectively within defined workplace procedures
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Lead Workplace Communication**
Unit Code	**IND GOP3 16 0613**
Unit Descriptor	This unit covers the knowledge, attitudes and skills needed to lead in the dissemination and discussion of information and issues in the workplace.

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

Variable	Range	
Methods of communication	• Non-verbal gestures • Verbal • Face to face • Two-way radio • Speaking to groups	• Using telephone • Written • Using Internet • Cell phone

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: • Deal with a range of communication/information at one time • Make constructive contributions in workplace issues • Seek workplace issues effectively • Respond to workplace issues promptly • Present information clearly and effectively written form • Use appropriate sources of information • Ask appropriate questions • Provide accurate information
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Organization requirements for written and electronic communication methods • Effective verbal communication methods
Underpinning Skills	Demonstrates skills to: • Organize information • Understand and convey intended meaning • Participate in variety of workplace discussions • Comply with organization requirements for the use of written and electronic communication methods
Resources Implication	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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Lead Small Teams**
Unit Code	**IND GOP3 17 0613**
Unit Descriptor	This unit covers the knowledge, attitudes and skills to lead small teams including setting and maintaining team and individual performance standards.

Elements	Performance Criteria
1. Provide team leadership	1.1 ***Work requirements*** are identified and presented to team members. 1.2 Reasons for instructions and requirements are communicated to team members. 1.3 ***Team members' queries and concerns*** are recognized, discussed and dealt with.
2. Assign responsibilities	2.1 Duties and responsibilities are allocated having regard to the skills, knowledge and aptitude required to properly undertake the assigned task and according to company policy. 2.2 Duties are allocated having regard to individual preference, domestic and personal considerations, whenever possible.
3. Set performance expectations for team members	3.1 Performance expectations are established based on client needs and according to assignment requirements. 3.2 Performance expectations are based on individual team members duties and area of responsibility. 3.3 Performance expectations are discussed and disseminated to individual team members.
4. Supervised team performance	4.1 ***Monitoring of performance*** takes place against defined performance criteria and/or assignment instructions and corrective action taken if required. 4.2 Team members are provided with ***feedback***, positive support and advice on strategies to overcome any deficiencies. 4.3 ***Performance issues*** which cannot be rectified or addressed within the team are referenced to appropriate personnel according to employer policy. 4.4 Team members are kept informed of any changes in the priority allocated to assignments or tasks which might impact on client/customer needs and satisfaction. 4.5 Team operations are monitored to ensure that employer/ client needs and requirements are met.

	4.6 Follow-up communication is provided on all issues affecting the team. 4.7 All relevant documentation is completed in accordance with company procedures.

Variable	Range
Work requirements	• client profile • assignment instructions
Team member's concerns	• roster/shift details
Monitor performance	• formal process • informal process
Feedback	• formal and informal processes

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate to: • maintain or improve individuals and/or team performance given a variety of possible scenario • assess and monitor team and individual performance against set criteria • represent concerns of a team and individual to next level of management or appropriate specialist and to negotiate on their behalf • allocate duties and responsibilities, having regard to individual's knowledge, skills and aptitude and the needs of the tasks to be performed • set and communicate performance expectations for a range of tasks and duties within the team and provided feedback to team members
Underpinning Knowledge and Attitudes	Demonstrates knowledge of • maintaining or improving individuals and/or team performance given a variety of possible scenario • assessing and monitoring team and individual performance against set criteria • representing concerns of a team and individual to next level of management or appropriate specialist and to negotiate on their behalf • allocating duties and responsibilities, having regard to individual's knowledge, skills and aptitude and the needs of the tasks to be performed • setting and communicating performance expectations for a range of tasks and duties within the team and providing feedback to team members

Underpinning Skills	• communication skills required for leading teams • informal performance counseling skills • team building skills • negotiating skills
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: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Improve Business Practice**
Unit Code	**IND GOP3 18 0613**
Unit Descriptor	This unit covers the skills, knowledge and attitudes required in promoting, improving and growing business operations.

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

	4.7 ***Practice brand*** is developed. 4.8 ***Benefits*** of practice/practice products/services are identified. 4.9 ***Promotion tools*** are selected/ developed.
5. Develop business growth plans	5.1 Plans are developed to increase ***yield per existing client***. 5.2 Plans are developed to add new clients. 5.3 Proposed plans are ranked according to agreed criteria. 5.4 An action plan is developed and agreed to implement the top ranked plans. 5.5 Practice work practices are reviewed to ensure they support growth plans.
6. Implement and monitor plans	6.1 Implementation plan is developed in consultation with all relevant stakeholders. 6.2 Indicators of success of the plan are agreed. 6.3 Implementation is monitored against agreed indicators. 6.4 Implementation is adjusted as required.

Variable	**Range**
Data required	May include but not limited to: • organization capability • appropriate business structure • level of client service which can be provided • internal policies, procedures and practices • staff levels, capabilities and structure • market, market definition • market changes/market segmentation • market consolidation/fragmentation • revenue • level of commercial activity • expected revenue levels, short and long term • break even data • pricing policy • revenue assumptions • business environment • economic conditions • social factors • demographic factors • technological impacts • political/legislative/regulative impacts

	• competitors, competitor pricing and response to pricing • competitor marketing/branding and products
Competitive advantage	May include but not limited to: • services/products, fees, location and timeframe
SWOT analysis	May include but not limited to: • internal strengths such as staff capability, recognized • quality • internal weaknesses such as poor morale, • under-capitalization, poor technology • external opportunities such as changing market and • economic conditions • external threats such as industry fee structures, strategic • alliances, competitor marketing
Key indicators	May include but not limited to: • salary cost and staffing • personnel productivity (particularly of principals) • profitability • fee structure • client base • size staff/principal and overhead/overhead control
Organizational structures	May include but not limited to: • Legal structure (partnership, Limited Liability Company, etc.) • organizational structure/hierarchy and reward schemes
Objectives should be 'SMART'	May include but not limited to: • S: Specific • M: Measurable • A: Achievable • R: Realistic and T: Time defined
Market research data	May include but not limited to: • data about existing clientsand possible new clients • data from internal sources • data from external sources such as: ➢ trade associations/journals ➢ Yellow Pages small business surveys ➢ libraries ➢ Internet ➢ Chamber of Commerce ➢ client surveys ➢ industry reports and secondary market research • primary market research such as: ➢ telephone surveys, personal interviews and mail surveys
Competitor analysis	competitor offerings, promotion strategies, activities and profile in the market place

Market position should include data on:	May include but not limited to: • product • the good or service provided • product mix • the core product - what is bought • the tangible product - what is perceived • the augmented product - total package of consumer • features/benefits • product differentiation from competitive products • new/changed products • Price and pricing strategies (cost plus, supply/demand, ability to pay, etc.) • Pricing objectives (profit, market penetration, etc.) • cost components • market position • distribution strategies • marketing channels • promotion • promotional strategies • target audience, communication and promotion budget
Practice brand	May include but not limited to: • practice image • practice logo/letter head/signage • phone answering protocol • facility decor • slogans • templates for communication/invoicing • style guide • writing style and AIDA (Attention, Interest, Desire and Action)
Benefits	features and benefits as perceived by the client
Promotion tools	May include but not limited to: • networking and referrals • seminars • advertising • press releases • publicity and sponsorship • brochures • newsletters (print and/or electronic) • websites • direct mail and telemarketing/cold calling
Yield per existing client	raising charge out rates/fees, packaging fees, reduce discounts and sell more services to existing clients

Evidence Guide	
Critical Aspects of Competence	Demonstrates ability to: • identify the key indicators of business performance • to identify the key market data for the business • knowledge of a wide range of available information sources • acquire information not readily available within a business • analyze data and determine areas of improvement • negotiate required improvements to ensure implementation • evaluate systems against practice requirements and form recommendations and/or make recommendations • assess the accuracy and relevance of information
Underpinning Knowledge and Attitudes	• data analysis • communication skills • computer skills to manipulate data and present information • negotiation skills • problem solving • planning skills • marketing principles • ability to acquire and interpret relevant data • current product and marketing mix • use of market intelligence • development and implementation strategies of promotion and growth plans
Underpinning Skills	• data analysis and manipulation • ability to acquire and interpret required data, current practice systems and structures and sources of relevant benchmarking data • applying methods of selecting relevant key benchmarking indicators • communication skills • working and consulting with others when developing plans for the business • planning skills, negotiation skills and problem solving • using computers to manipulate, present and distribute information
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • 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: Grain and Edible Oil Processing Level III	
Unit Title	**Prevent and Eliminate MUDA**
Unit Code	**IND GOP3 19 0613**
Unit Descriptor	This unit of competence covers the knowledge, skills and attitude required by a worker to prevent and eliminate MUDA/wastes in his/her their workplace. It covers responsibility for the day-to-day operation of the work and ensures Kaizen elements are continuously improved and institutionalized.

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

4. Prevent occurrence of wastes/MUDA.	4.1 Plan of MUDA prevention is prepared and implemented. 4.2 Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement are discussed and prepared. 4.3 Occurrences of wastes/MUDA are prevented by using ***visual and auditory control methods***. 4.4 Waste-free workplace is created using ***5W and 1H***sheet. 4.5 The completion of required operation is done in accordance with standard procedures and practices. 4.6 The updating of standard procedures and practices is facilitated. 4.7 The capability of the work team that aligns with the requirements of the procedure is ensured.

Variable	**Range**
OHS requirements	May include but not limited to: • Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances. • Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices. • Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization. • Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation.
Safety equipment and tools	May include but not limited to: • dust masks / goggles • glove • working cloth • first aid • safety shoes
Tools and techniques	May include but not limited to: • Plant Layout • Process flow

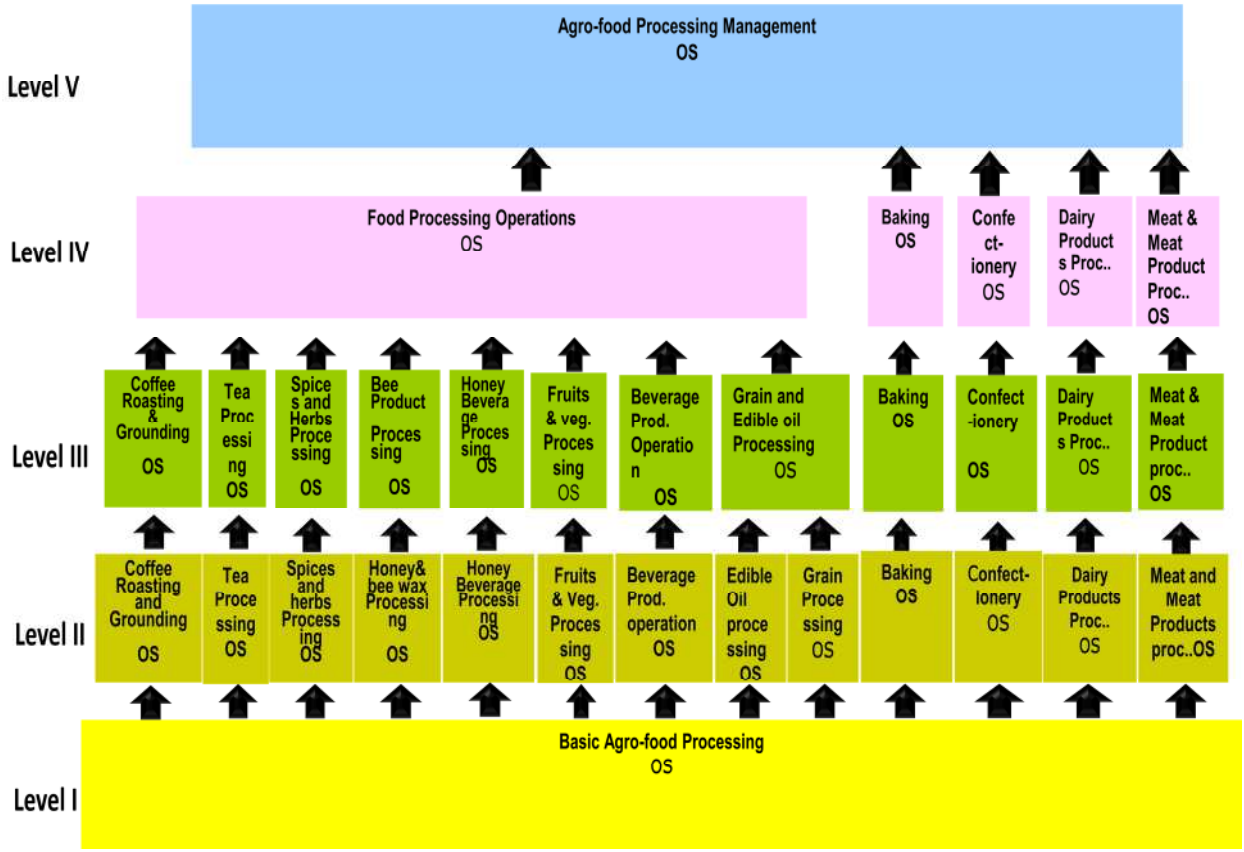
	• Other Analysis tools • Do time study by work element • Measure Travel distance • Take a photo of workplace • Measure Total steps • Make list of items/products, who produces them and who uses them & those in warehouses, storages etc. • Focal points to Check and find out existing problems • 5S • Layout improvement • Brainstorming • Andon • U-line • In-lining • Unification • Multi-process handling & Multi-skilled operators • A.B. control (Two point control) • Cell production line • TPM (Total Productive Maintenance)
Relevant procedures	May include but not limited to: • Make waste visible • Be conscious of the waste • Be accountable for the waste. • Measure the waste.
The ten basic principles for improvement	May include but not limited to: • Throw out all of your fixed ideas about how to do things. • Think of how the new method will work- not how it won. • Don't accept excuses. Totally deny the status quo. • Don't seek perfection. A 5o percent implementation rate is fine as long as it's done on the spot. • Correct mistakes the moment they are found. • Don't spend a lot of money on improvements. • Problems give you a chance to use your brain. • Ask "why?" At least five times until you find the ultimate cause. • Ten people's ideas are better than one person's. • Improvement knows no limits.
Visual and auditory control methods	May include but not limited to: • Red Tagging • Sign boards • Outlining • Andons • Kanban, etc.

5W and 1H	May include but not limited to: • Who • What • Where • When • Why • How

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: • discuss why wastes occur in the workplace • discuss causes and effects of wastes/MUDA in the workplace • analyze the current situation of the workplace by using appropriate tools and techniques • identify, measure, eliminate and prevent occurrence of wastes by using appropriate tools and techniques • use 5W and 1H sheet to prevent
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Targets of customers and manufacturer/service provider • Traditional and kaizen thinking of price setting • Kaizen thinking in relation to targets of manufacturer/service provider and customer • value • The three categories of operations • the 3“MU” • waste/MUDA • wastes occur in the workplace • The 7 types of MUDA • The Benefits of identifying and eliminating waste • Causes and effects of 7 MUDA • Procedures to identify MUDA • Necessary attitude and the ten basic principles for improvement • Procedures to eliminate MUDA • Prevention of wastes • Methods of waste prevention • Definition and purpose of standardization • Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement • Methods of visual and auditory control • TPM concept and its pillars.

	• Relevant Occupational Health and Safety (OHS) and environment requirements • Plan and report • Method of communication
Underpinning Skills	Demonstrates skills to: • draw & analyze current situation of the work place • use measurement apparatus (stop watch, tape, etc.) • calculate volume and area • use and follow checklists to identify, measure and eliminate wastes/MUDA • identify and measure wastes/MUDA in accordance with OHS and procedures • use tools and techniques to eliminate wastes/MUDA in accordance with OHS procedure • apply 5W and 1H sheet • update and use standard procedures for completion of required operation • work with others • read and interpret documents • observe situations • solve problems • communicate • gather evidence by using different means • report activities and results using report formats
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • 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
Sub- sector: Agro-food Processing



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This occupational standard was developed on the date of June 25, 2013 at Debre Zeyit Ethiopian Management Institute.

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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