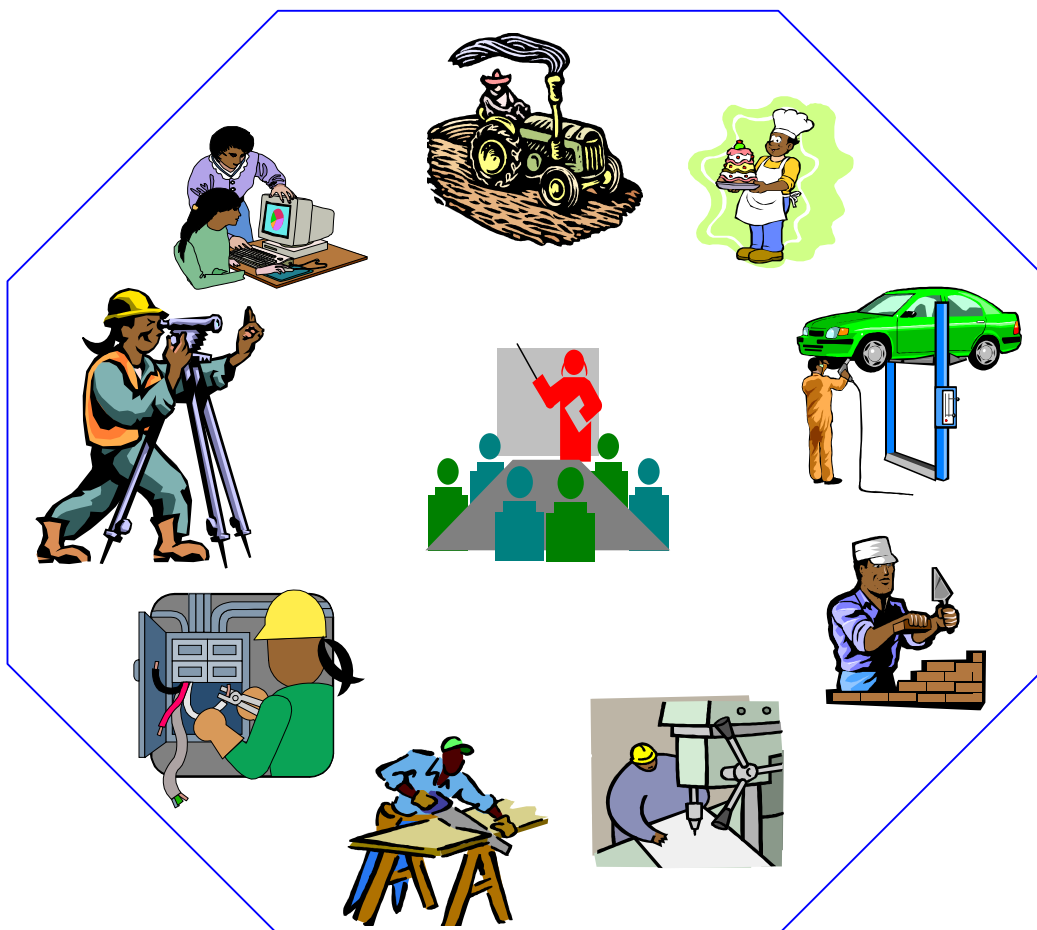**Federal Democratic Republic of Ethiopia**

OCCUPATIONAL STANDARD

MEAT AND MEAT PRODUCTS PROCESSING

NTQF Level II, III and IV

Ministry of Education
July 2013

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 (Unit of Competence Chart) 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: Meat & Meat Products Processing	
Occupational Code: IND MPP	
NTQF level II	

IND MPP2 01 0613 Overview of the Meat Industry	IND MPP2 02 0613 Apply Hygiene and Sanitation Practices	IND MPP2 03 0613 Identify Species and Meat Cuts
IND MPP2 04 0613 Trim Meat for Further Processing	IND MPP2 05 0613 Prepare and Slice Meat Cuts	IND MPP2 06 0613 Prepare Minced Meat and Minced Meat Products
IND MPP2 07 0613 Prepare Dry Ingredients	IND MPP2 08 0613 Cure and Corn Product in a Meat Processing Plant	IND MPP2 09 0613 Fill and Close Product in Cans
IND MPP2 10 0613 Monitor Meat Temperature from Receival to Sale	IND MPP2 11 0613 Make and Sell Sausages	IND MPP2 12 0613 Select/Identify and Prepare Casings
IND MPP2 13 0613 Pack and Store Meat Product	IND MPP2 14 0613 Apply Basic Methods of Meat Cookery and Storage	IND MPP2 15 0613 Package Product Using Automatic Packing and Labeling Equipment
IND MPP2 16 0613 Load out and Dispatch Meat Product	IND MPP2 17 0613 Process Offals	IND MPP2 18 0613 Process Pet Meat and Blood
IND MPP2 19 0613 Operate Tenderiser and Mincer	IND MPP2 20 0613 Operate Rendering Machines	IND MPP2 21 0613 Comply with Quality Assurance and HACCP Requirements
IND MPP2 22 0613 Maintain Production Records and Present Data	IND MPP2 23 0613 Participate in Workplace Communication	IND MPP2 24 0613 Work in Team Environment
IND MPP2 25 0613 Develop Business Practice	IND MPP2 26 0613 Standardize and Sustain 3S	

NTQF level III

IND MPP3 01 0613 Sort and Batch Meat	IND MPP3 02 0613 Bone Small Stock Carcase – Leg	IND MPP3 03 0613 Slice and Trim Leg - Small Stock
IND MPP3 04 0613 Blend Meat Product	IND MPP3 05 0613 Cook, Steam and Cool Product	IND MPP3 06 0613 Operate Batch Cooker
IND MPP3 07 0613 Operate Continuous Cooker	IND MPP3 08 0613 Prepare Dried Meat	IND MPP3 09 0613 Smoke Product
IND MPP3 10 0613 Fill Casings	IND MPP3 11 0613 Operate Leg Boning Machine	IND MPP3 12 0613 Operate Complex Slicing and Packaging Machinery
IND MPP3 13 0613 Operate Blood Processing Plant	IND MPP3 14 0613 Operate Tallow Processing Plant	IND MPP3 15 0613 Monitor Boiler Operations
IND MPP3 16 0613 Produce Rendered Products Hygienically	IND MPP3 17 0613 Operate Wet Rendering	IND MPP3 18 0613 Implement Food Safety Program in Meat Processing Plant
IND MPP3 19 0613 Monitor Implementation of Work plan/Activities	IND MPP3 20 0613 Apply quality Control	IND MPP3 21 0613 Lead Workplace Communication
IND MPP3 22 0613 Lead Small Teams	IND MPP3 23 0613 Improve Business Practice	IND MPP3 24 0613 Prevent and Eliminate MUDA

NTQF Level IV

IND MPP4 01 0613 Apply Meat Science	IND MPP4 02 0613 Develop and Implement Work Instructions and SOPs	IND MPP4 03 0613 Participate in OHS Risk Control Process
IND MPP4 04 0613 Facilitate Hygiene and Sanitation Performance	IND MPP4 05 0613 Monitor and Overview the Production of Uncooked Comminuted Fermented Meat (UCFM)	IND MPP4 06 0613 Monitor and Overview the Production of Processed Meats and Small Goods
IND MPP4 07 0613 Monitor Meat Preservation Process	IND MPP4 08 0613 Apply an Understanding of Food Additives	IND MPP4 09 0613 Apply Sensory Analysis in Food Processing
IND MPP4 10 0613 Implement a Meat Hygiene Assessment Program	IND MPP4 11 0613 Identify, Evaluate and Control Food Safety Hazards	IND MPP4 12 0613 Participate In Ongoing Development and Implementation of a HACCP and Quality Assurance System
IND MPP4 13 0613 Develop and Implement Quality Assurance Program for a Rendering Plant	IND MPP4 14 0613 Assess and Evaluate Meat Industry Requirements and Processes	IND MPP4 15 0613 Manage Transportation of Meat, Meat Products and Meat By-products
IND MPP4 16 0613 Plan and Organize Work	IND MPP4 17 0613 Migrate to New Technology	IND MPP4 18 0613 Establish Quality Standards
IND MPP4 19 0613 Develop Teams and Individuals	IND MPP4 20 0613 Utilize Specialized Communication Skills	IND MPP4 21 0613 Manage and Maintain Small/Medium Business Operations
IND MPP4 22 0613 Apply Problem Solving Techniques and Tools		

NTQF level II

Occupational Standard: Meat & Meat Products Processing Level II	
Unit Title	**Overview of the Meat Industry**
Unit Code	**IND MPP2 01 0613**
Unit Descriptor	This unit covers the skills and knowledge required to provide employees with an understanding of the structure of the meat industry, their own workplace and the policies, procedures and conditions relevant to their employment.

Elements	Performance Criteria
1. Work within the industry sector	1.1. Composition and structure of the meat industry are examined to provide an overview for work priorities.
	1.2. Major species and trade markets are examined.
	1.3. Path of meat is traced from paddock to plate.
	1.4. Flow of product is traced from stockyards to meat processing plant, to meat wholesalers and retailers, and through small goods plants.
	1.5. Products are identified according to workplace procedures.
2. Apply workplace policies	2.1. Relevant **workplace policies** are obtained and applied, where appropriate.
	2.2. Role of trainees is identified in relation to workplace policies.
	2.3. Information on working conditions is obtained and important elements identified.
3. Follow award or employment agreement provisions	3.1. Information about relevant **award provisions** and employment conditions are obtained and applied, where appropriate.
	3.2. Information on employee rights and responsibilities is obtained and explained.
4. Identify appropriate organisations and Follow Equal Employment Opportunity (EEO) legislative requirements	4.1. Major **meat industry organizations and associations**, peak bodies and regulatory bodies, and their roles are identified.
	4.2. Information about EEO provisions is obtained and applied as appropriate.
	4.3. Information on sexual harassment is obtained and policies against sexual harassment are explained in terms of personal responsibility.
5. Demonstrate awareness of environmental issues in the meat industry	5.1. Relevant **environmental regulatory requirements** are identified.
	5.2. **Workplace requirements**, environmental policies and practices are identified.

	5.3. Nature and role of *work instructions*, *Standard Operating Procedures (SOPs)*, *explanations and reports* are identified.
	5.4. Relevance of *Occupational Health and Safety (OHS)* and *regulatory requirements* are explained for meat industry employees.
	5.5. Consequences of not following workplace environmental policies and practices are identified.

Variable	Range
Workplace policies	may include: • environmental policies • mission statements • OHS policies • organisational structure • quality assurance (QA) manual • strategic planning • Work instructions.
Award provisions	may relate to: • Ethiopian Workplace Agreements • Balanced score card(BSC) Achievement • enterprise bargaining agreements • State, territory or federal awards.
Meat industry organisations and associations	include: • Export Abattoirs • Local Abattoirs • Ethiopian meat exporters trade association • Ethiopian Meat and Dairy Technology Institute (EMDTI) • Animal and Plant Health Regulatory • Directorate(APHRD)
Environmental regulatory requirements	may include: • effluent treatment or control • noise control • odours and emissions management • waste and water management
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • QA requirements • SOPs • the ability to perform the task to production requirements • Work instructions.
Work instructions, SOPs, explanations and reports	may: • be in English, Amharic and other local languages • be in everyday workplace language, including some mathematical language

	• be in languages other than English • be presented in routine proformas using accurately copied information, symbols, numbers, abbreviations, codes and sketches • be presented orally • be routine, simple and brief • include the use of visual aids (e.g. video, OHS signs, symbols and other pictorial presentations).

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice

Regulatory requirements	may include: • Export Control Act Federal, regulations regarding meat processing and the environment • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • Requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: • Explain principles of EEO and policies to prevent sexual harassment • Explain relevance of Occupational Health and Safety (OHS) and regulatory requirements for meat industry employees • explain employee's responsibilities • explain the flow of product from receival to sale in own workplace

Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • dispute resolution procedures in the workplace nature and role of work instructions, Standard operating Procedures (SOPs),explanations and reports principles of EEO and policies to prevent sexual harassment relevance of Occupational Health and Safety (OHS) and regulatory requirements for meat industry employees • workplace employment conditions • enterprise ethical standards and requirements for interacting with other employees and staff
Underpinning Skills	Demonstrate skills to: • explain employee's responsibilities • explain the flow of product from receival to sale in own workplace • follow relevant workplace policies • identify relevant workplace requirements, policies and procedures and explain their implications for trainees • list the markets where the company's products are distributed • name the products produced in own workplace • outline the path of meat from paddock to plate • relate to others in an effective and non-discriminatory way showing mutual respect • use relevant communication 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: Meat & Meat Products Processing Level II	
Unit Title	**Apply Hygiene and Sanitation Practices**
Unit Code	**IND MPP2 02 0613**
Unit Descriptor	This unit covers the skills and knowledge required to apply the personal hygiene and sanitation practices required of workers in a meat operation. It also covers cleaning equipment and immediate work areas during operations.

Element	Performance Criteria
1. Clean own work area and equipment during operations	1.1. Worksite is hygienically cleaned during operations to ***Occupational Health and Safety (OHS)***, ***workplace*** and ***regulatory requirements***.
	1.2. Equipment and surfaces are hygienically cleaned to regulatory and workplace requirements.
	1.3. Cleanliness of work area is monitored according to workplace requirements.
2. Identify sources of contamination and spoilage	2.1. ***Sources of contamination*** and cross-contamination risks are identified and ***steps taken to reduce the risk***.
	2.2. ***Corrective action*** is taken when contamination is identified in accordance with workplace and regulatory requirements.
3. Follow workplace hygiene and sanitation requirements	3.1. Personal hygiene practices are followed to workplace requirements.
	3.2. Product is handled in accordance with workplace, and ***hygiene and sanitation requirements.***
	3.3. Individual's work is conducted hygienically in accordance with workplace requirements.
	3.4. Products are processed in accordance with regulatory requirements.

Variable	Range

OHS requirements	may include:
	 • enterprise OHS policies, procedures and programs
	 • OHS legal requirements
	 • Personal Protective Equipment (PPE) may include:
	    ➢ coats and aprons
	    ➢ ear plugs or muffs
	    ➢ eye and facial protection
	    ➢ head-wear
	    ➢ lifting assistance

	➤ mesh aprons ➤ protective boot covers ➤ protective hand and arm covering ➤ protective head and hair covering ➤ uniforms ➤ waterproof clothing ➤ work, safety or waterproof footwear • Requirements set out in standards and codes of practice
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Regulatory requirements	may include: • Export Control Act • Federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • requirements set out in Ethiopian Standard for Hygienic Production of Wild Game Meat for Human consumption
Sources of contamination	may include: • chemical agents (e.g. insecticides and cleaning agents) • foreign bodies • microbiological and biological agents • physical agents (e.g. ingesta, excreta, dust and grease)
Steps taken to reduce the risk	may include: • good housekeeping practices • hand washing • Maintaining clean clothes and PPE.
Corrective action	may include: • disposing of contaminated product • Trimming product.
Hygiene and sanitation requirements	may include: • relevant government regulations • Workplace requirements.
Communication	may be spoken, written, non-verbal and include signs and signals

	• be with people from a range of cultural, social and ethnic backgrounds or with colleagues, superiors, customers, clients and external parties

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Clean own work area and equipment during operations • Identify sources of contamination and spoilage • Follow workplace hygiene and sanitation requirements
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • hygiene and sanitation requirements for own area • reporting procedures for contamination, as appropriate • chemical contamination risks to product and how they are controlled • consequences of contaminated or spoiled meat leaving the establishment • consequences of failing to follow workplace requirements for hygienic handling and processing of meat • time, temperature and moisture requirements for microbial growth • causes of food spoilage and poisoning • possible sources of contamination and cross-contamination in the worksite • visual evidence of contamination • microbes which may affect meat • the scope and coverage of Hygienic production and transportation of meat and meat products for human consumption • sources of physical and microbiological contamination in meat establishments and how these hazards are controlled • monitoring methods (e.g. visual, looks clean, smells clean and use of protein sticks)
Underpinning Skills	Demonstrates skills to: • consistently follow workplace, hygiene and sanitation procedures • work effectively as an individual and as part of a team to keep work areas clean • demonstrate basic hygiene and sanitation practices in all activities undertaken in the workplace • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology

	• use communication skills relevant to the task • use and mix cleaning chemicals (if used) according to manufacturer specifications, regulatory and workplace requirements
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: Meat & Meat Products Processing Level II	
Unit Title	**Identify Species and Meat Cuts**
Unit Code	**IND MPP2 03 0613**
Unit Descriptor	This unit covers the skills and knowledge required to identify species and meat cuts.

Elements	Performance Criteria
1. Identify meat cuts	1.1. Meat cuts are correctly identified by cut name and ***species*** according to workplace requirements and ***specifications***.
	1.2. Meat cuts are correctly selected by cut name and species according to ***workplace requirements***.
	1.3. Relevant ***regulatory requirements*** are applied.
2. Identify primal cuts	2.1. Primal cuts are correctly identified by name and species according to workplace requirements.
	2.2. Different ***categories of meat*** primal cuts are correctly selected by name and species according to workplace requirements.
	2.3. Products are selected and handled according to ***Occupational Health and Safety (OHS) requirements***.

Variable	Range
Species	may include: • beef • sheep • goat • camel • poultry • buffalo • crocodile • deer • game meat • kangaroo • pork or any other species
Specifications	may be defined by: • customer specifications • enterprise procedures • Industry standards.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements

	• Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Regulatory requirements	may include: • Export Control Act • regulations regarding meat processing and food handling • hygiene and sanitation requirements • relevant Ethiopian Standards • Relevant regulations.
Categories of meat	include: • age • differentiation of classes • sex • Weight

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers
	   ➢ protective hand and arm covering
	   ➢ protective head and hair covering
	   ➢ uniforms
	   ➢ waterproof clothing
	   ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: • demonstrate over time and under typical operating and production conditions for the enterprise. • The candidate must be able to select and identify primal and secondary cuts correctly by species and cut for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing. • Where the candidate does not prepare primal cuts in their usual place of work they must complete the requirements of the Unit in an alternative work placement or in a simulated environment.

Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • primal cuts used for different cuts of meat for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing • principles of product selection by species, primal and cut type for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing relevant regulatory requirements • appropriate sources of information on new species or cuts • different species and categories of meat and cuts for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing
Underpinning Skills	Demonstrate skills to: • identify meat cuts according to label on cartons (as appropriate) • identify primal cuts correctly by species and cut according to workplace specifications for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing • apply relevant regulatory requirements • select and handle products according to Occupational Health and Safety (OHS) requirements • select cuts correctly by species and cut according to workplace requirements for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing • Identify cuts correctly by species and cut according to workplace specifications for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing • select primal cuts correctly by species and cut according to workplace requirements for a minimum of three species for meat retailing and at least one species for smallgoods manufacturing
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: Meat & Meat Products Processing Level II	
Unit Title	**Trim Meat for Further Processing**
Unit Code	**IND MPP2 04 0613**
Unit Descriptor	This unit covers the skills and knowledge required to use a knife for trimming lesser-valued cuts of meat. The trim is usually performed prior to further processing such as mincing and sausage making.

Elements	Performance Criteria
1. Trim meat to workplace specifications	1.1. Meat is trimmed to **workplace specifications**. 1.2. Meat is trimmed to **Occupational Health and Safety (OHS)**, **hygiene and sanitation**, and **workplace requirements**.
2. Handle product hygienically	2.1. Product is handled according to OHS requirements 2.2. Product is handled to meet hygiene requirements.
3. Handle knife effectively	3.1. Different types of knifes are identified. 3.2. **Knife** is handled safely, hygienically and effectively.

Variable	Range
Workplace specifications	may include: • dicing for further processing • removing connective tissue prior to further processing • trimming excess fat • trimming excess meat from bones

OHS requirements	may include:
	 • enterprise OHS policies, procedures and programs
	 • OHS legal requirements
	 • Personal Protective Equipment (PPE) which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers
	   ➢ protective hand and arm covering
	   ➢ protective head and hair covering
	   ➢ uniforms
	   ➢ waterproof clothing
	   ➢ work, safety or waterproof footwear
	 • Requirements set out in standards and codes of practice.

Hygiene and sanitation requirements	may include: • relevant government regulations • Workplace requirements.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Knives	include: • boning knives • skinning knives • Steak knives.
Regulatory requirements	may include: • Export Control Act • regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace related documentation • sharing information • speaking clearly and directly • Working with diverse individuals and groups.

Evidence Guide	
Critical Aspects of Competence	Competency must be demonstrated over time and under typical operating and production conditions for the enterprise to: • Explain steps in checking and preparing a knife • Apply how to trim a variety of lesser-valued cuts of meat to specification according to workplace requirements • demonstrate effective use of a knife to workplace, OHS, and hygiene requirements
Underpinning Knowledge and Attitudes	• hygiene requirements for use of a knife • OHS requirements for use of a knife • steps in checking and preparing a knife • workplace requirements for use of a knife • relevant regulatory and workplace requirements • hygiene requirements for the handling of meat products
Underpinning Skills	• trim a variety of lesser-valued cuts of meat to specification according to workplace requirements

	• demonstrate effective use of a knife to workplace, OHS, and hygiene requirements • work individually and with other team members • give examples of workplace specifications for trimming meat • apply relevant regulatory and workplace requirements • seek further advice from supervisor when uncertain about work instructions • use relevant communication 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: Meat & Meat Products Processing Level Ii	
Unit Title	Prepare and Slice Meat Cuts
Unit Code	**IND MPP2 05 0613**
Unit Descriptor	This unit covers the skills and knowledge required to prepare and slice meat into finished meat cuts.

Element	Performance Criteria
1. Slice and trim meat in preparation for sale	1.1. ***Meat cuts*** are prepared and sliced according to ***workplace requirements*** and customer specifications.
	1.2. Meat cuts are separated into final meat cuts according to Quality Assurance (QA), hygiene and sanitation and Occupational Health and Safety (OHS) ***requirements***, and customer specifications.
2. Handle knife effectively	2.1. different types of knives used in trimming and slicing are identified
	2.3. Knife is handled safely, hygienically and effectively according to ***Regulatory requirements***.
	2.4. Advice is sought from relevant sources when working with new ***cutting equipment*** or products

Variable	Range
Meat cuts	may include • customer specifications • end use • enterprise specifications • species • beef - rump, round topside, chick, shin, blade steaks • pork - loin, topside, leg steaks • sheep meat - leg steaks.
Workplace requirements	may include: • enterprise-specific procedures • hygiene and sanitation requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
OHS requirements	may include: • enterprise OHS policies, procedures and programs • OHS legal requirements

	• Personal Protective Equipment (PPE) which may include:
	➢ coats and aprons
	➢ ear plugs or muffs
	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • state regulations regarding meat processing.
Cutting equipment	may include: • commercial, hand held and mechanical knives
Communication skills	may include: • applying basic numeracy skills to workplace requirements • communicating and working with diverse individuals and groups • listening and understanding • reading and interpreting workplace-related documentation • Speaking directly and clearly.
For meat retailing, competency is required for beef and sheep plus one other species from the following:	• buffalo • emu • game • goat • pork • poultry • any other species.
For smallgoods manufacturing, competency is required for at least one species from the following:	• beef • game • goat • pork • sheep • any other species.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate: • For meat retailing prepare and slice meat cuts for all primals for three species (including beef and sheep) to workplace and regulatory requirements, similar to the speed of production. • For smallgoods manufacturing prepare and slice meat cuts for all primals for one species to workplace and regulatory requirements, similar to the speed of production.
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • principles of QA, hygiene and sanitation, and OHS in relation to cutting meat • workplace requirements related to slicing meat • relevant regulatory requirements
Underpinning Skills	Demonstrates skills to: • demonstrate correct cutting, slicing and trimming techniques • use safe and effective knife skills • identify and name examples of finished meat cuts • apply relevant regulatory requirements • slice and trim meat in preparation for sale according to OHS, hygiene and workplace requirements and customer specifications • prepare finished meat cuts from all primals relevant to meat retailing and/or smallgoods manufacturing • remove defects from products according to workplace and regulatory requirements • work effectively as an individual and as part of a team • seek advice from relevant sources when working with new cutting equipment or products • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology • Use communication skills 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: Meat & Meat Products Processing Level II	
Unit Title	**Prepare Minced Meat and Minced Meat Products**
Unit Code	**IND MPP2 06 0613**
Unit Descriptor	This unit covers the skills and knowledge required to prepare minced meat and minced meat products to regulatory requirements.

Elements	Performance Criteria
1. Clean and prepare processing equipment used in the preparation of minced meat products	1.1. Mincing equipment is prepared to process *minced meat products* according to manufacturer's specifications and *workplace*, *Occupational Health and Safety (OHS)*, and *hygiene and sanitation requirements*.
	1.2. Mincing equipment is cleaned according to manufacturer specifications, and workplace and OHS requirements.
	1.3. *Meat* mincing equipment is adjusted as required in accordance with manufacturer specifications and workplace, OHS and hygiene requirements.
2. Mince meat	2.1. *Trimmings* are selected according to workplace policy.
	2.2. Trimmings are cut to manufacturer specifications and workplace requirements to avoid blockages in mincer.
	2.3. Trimmings are fed through mincer efficiently to avoid blockages and heat build-up.
	2.4. Species are accurately identified.
	2.5. Species are stored separately according to product description.
	2.6. Product is maintained at correct temperature during processing.
	2.7. Product is handled and stored at correct temperature and conditions.
3. Prepare minced meat products	3.1. Minced meat products are prepared according to regulatory, workplace, hygiene and OHS requirements.
	3.2. Ingredients are combined to workplace requirements.
	3.3. *Fat content* is measured with the required regulatory requirement.
	3.4. Meat is processed in preparation for forming to product specifications and *regulatory requirements*.
	3.5. Product is formed to specifications and regulatory requirements.

	3.6. Correct temperature of product is maintained during processing and handling.
	3.7. Product is stored at correct temperature and conditions.

Variable	Range
Minced meat products	may include: • burgers • meat loaves • pin wheels • rissoles • sizzle sticks • steakettes.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Hygiene and sanitation requirements	may include: • relevant government regulations • Workplace requirements.
Meat	may include: • beef • chicken • game meat • lamb

	• mutton
	• pork
	• veal
	• camel
Trimmings	may include:
	• carton products
	• chilled or frozen product
	• Single species of cuts.
Fat content	may be measured by:
	• Chemical Lean (CL)
	• Visual estimation (VL).
Regulatory requirements	may include:
	• Export Control Act
	• federal and state regulations regarding meat processing and food handling
	• relevant Ethiopian Standards and relevant regulations.
Communication skills	may include:
	• applying numeracy skills to workplace requirements
	• listening and understanding
	• reading and interpreting workplace documentation
	• sharing information
	• speaking clearly and directly
	• working with diverse individuals and groups

Evidence Guide	
Critical Aspects of Competence	Must confirm appropriate knowledge and skills to:
	• Measure fat content using chemical lean measures or visual lean estimation
	• purpose and use of processing equipment used in making minced meat products
	• activate mincing equipment to assess its readiness for operational use
	• identify different species and categories of meat
	• list minced meat products
Underpinning Knowledge and Attitudes	Demonstrate knowledge of:
	• conditions under which equipment may need adjusting
	• fat content using chemical lean measures or visual lean estimation
	• purpose and use of processing equipment used in making minced meat products
	• temperature requirements for product
	• purposes and processes for undertaking emergency stops, machine lockouts and isolation procedures
	• procedure for cleaning equipment

Underpinning Skills	Demonstrate skills to:
	• activate mincing equipment to assess its readiness for operational use
	• identify different species and categories of meat
	• start-up and shut-down equipment when necessary according to manufacturer, workplace and OHS, requirements
	• operate a mincer to manufacturer, workplace, OHS, and hygiene and sanitation requirements
	• tighten front plate on mincer as required
	• operate adjustment tools and equipment correctly
	• interpret time and temperature measuring equipment
	• accurately copy and record temperature, weights and time, according to workplace requirements
	• clean mincer between species to avoid cross-contamination
	• use tools and cleaning agents appropriate to the cleaning activity or manufacturer's specifications
	• report faults and adjustments required either verbally or in writing according to workplace requirements
	• work individually and as part of a team
	• list minced meat products
	• perform tasks according to OHS, hygiene and regulatory requirements
	• seek advice from appropriate sources when working with new products
	• use relevant communication 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: Meat & Meat Products Processing Level II	
Unit Title	Prepare Dry Ingredients
Unit Code	**IND MPP2 07 0613**
Unit Descriptor	This unit covers the skills and knowledge required to prepare dry ingredients in a small goods manufacturing establishment.

Element	Performance Criteria
1. Select ingredients	1.1. ***Ingredients*** are selected by type and quality according to ***product specifications***.
	1.2. Dry ingredients are selected according to the formulation specification.
	1.3. Ingredients are handled hygienically at all times to prevent contamination.
2. Weigh and batch ingredients	2.1. Scales are correctly calibrated for precise measurement.
	2.2. Ingredients are placed in specific containers for weighing.
	2.3. Ingredients are weighed according to daily production requirements.
	2.4. Ingredients are sorted and weighed into batch quantities according to recipes and product requirements.
	2.5. Spices are mixed according to recipe.
3. Record usage	3.1. Ingredients are stored in a safe and hygienic manner.
	3.2. Usage of ingredients is accurately recorded to ***workplace requirements***.
	3.3. Usage of ingredients is accurately reconciled to production specifications.

Variable	Range
Ingredients may:	• need to adhere to legislative requirements • and may include additives, binders, pre-mixes, salt and spices
Product specifications	will vary according to: • customer and workplace requirements
Workplace requirements	• enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.

Mathematical skills may involve:	• accurate recording of volume, weight and quantity in standard formats or proformas • Interpreting and drawing conclusions from routine charts, bar graphs, pie charts, etc • operations involving percentages, comparisons and variations • Routine estimations and calculations using a range of specified formula and procedures.
Explanations may:	• be in everyday workplace language including mathematical language and some commonly used technical terms • be presented in writing using standard formats, proformas, charts and diagrams • be presented orally • Include mathematical and other information from several sources.

OHS requirements may include:	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ uniforms
	  ➢ work, safety or waterproof footwear
	  ➢ requirements set out in standards and codes of practice

Regulatory requirements may include:	• Export Control Act • regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards and relevant regulations.
Communication skills	• applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly • working with diverse individuals and groups • writing to audience needs

Evidence Guide	
Critical Aspects of Competency	Must demonstrate: • Competency must be demonstrated over time and under typical operating and production conditions for the enterprise. • Explain possible effects on product and on consumer health of using incorrect ingredients

	• Identify ingredient batches • various additives, spices, binders and ingredients and explain their functions in the product • explain steps to follow a recipe correctly • explain and demonstrate batching in accordance with food standards code
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • possible effects on product and on consumer health of using incorrect ingredients • health and hygiene factors relating to the preparation of dry ingredients • ingredient batches • OHS requirements related to the preparation of dry ingredients • relevant workplace and regulatory requirements • various additives, spices, binders and ingredients and explain their functions in the product • procedure for checking scale accuracy • steps to follow a recipe correctly
Underpinning Skills	Demonstrates skills to: • weigh ingredients to product specifications and daily production requirements • describe procedure to record usage of ingredients • apply mathematical skills appropriate to the task • work effectively with team members as appropriate • explain and demonstrate batching in accordance with food standards code • apply relevant Occupational Health and Safety (OHS), workplace and regulatory requirements • use relevant communication 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: Meat & Meat Products Processing Level II	
Unit Title	**Cure and Corn Product in a Meat Processing Plant**
Unit Code	**IND MPP2 08 0613**
Unit Descriptor	This unit covers the skills and knowledge required to cure and corn product in a meat processing plant.

Element	Performance Criteria
1. Process meat	1.1. Pre-operational checks are performed according to **workplace requirements**.
	1.2. **Meat** is cured or corned according to **product specifications**, health regulations and workplace requirements at a speed that is the same as production requirements.
	1.3. Processing is monitored regularly.
	1.4. Adjustments are made to processing as required to achieve product specifications.
	1.5. Adjustments and any equipment faults are **reported** according to workplace procedures
2. Store meat product	2.1. Processed product is stored according to product specifications.
	2.2. Processed product is stored according to **Occupational Health and Safety (OHS)** and **regulatory requirements**

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Meat	may include: • beef • mutton • veal • lamb • pork • game meat • Other meat species or products.

Product specifications	may vary according to:
	• Customer and workplace requirements.
Reports	may:
	• be in diagrammatic, sketch, tabular and graphic formats
	• be presented in writing, in standard formats
	• be presented orally
	• Include information and mathematical data gathered, interpreted and summarised from a range of complex and unfamiliar sources.
OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	➢ coats and aprons
	➢ ear plugs or muffs
	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ mesh aprons
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.
Regulatory requirements	may include:
	• Export Control Act
	• hygiene and sanitation requirements
	• relevant regulations
	• requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption
	• Federal, state and territory and regulations regarding meat processing.
Mathematical applications	may include:
	• Collection, estimation, calculation and interpretation of deviations within cycle, internal temperature, humidity, ambient temperature, weights.
Communication skills	may include:
	• listening and understanding
	• sharing information
	• speaking clearly and directly
	• Working with diverse individuals.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate: • Competency must be demonstrated under typical production conditions and at the normal speed of production. • selection criteria for meat for curing or corning process • explain the meat curing process • define the term 'osmosis' in relation to the curing process • effects of curing on shelf life and taste of product • perform running adjustments according to workplace requirements and manufacturer's specifications
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • selection criteria for meat for curing or corning process • the meat curing process • the term 'osmosis' in relation to the curing process • effects of curing on shelf life and taste of product • purpose and effect of brine on meat • purpose of correct water temperature and correct additive sequence • purpose and use of processing equipment used in curing and corning products • reasons for pickling to correct pump percentage and yield requirements • safe and correct operation of processing equipment • conditions under which equipment may need adjusting • relevant OHS and regulatory requirements • procedures for cleaning processing equipment
Underpinning Skills	Demonstrates skills to: • activate processing equipment to assess its readiness for operational use • perform running adjustments according to workplace requirements and manufacturer's specifications • operate adjustment tools and equipment correctly • report any equipment faults and adjustments required either verbally or in writing to supervisor, according to workplace procedures • Work effectively as an individual and as part of a team • apply relevant Occupational Health and Safety (OHS) and regulatory requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology • use mathematical applications relevant to the task • use relevant communication 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: Meat & Meat Products Processing Level II	
Unit Title	**Fill and Close Product in Cans**
Unit Code	**IND MPP2 09 0613**
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate, adjust and shut down a primary packaging process that fills product into cans and hermetically seals containers using a closer or seamer.

Element	Performance Criteria
1. Prepare the filling and closing process for operation	1.1. Materials and packaging components/consumables are confirmed and available to meet operating requirements.
	1.2. Cleaning and maintenance requirements and status are identified and confirmed according to regulatory ***policies and procedures***.
	1.3. Machine components and related attachments are fitted and adjusted to meet operating requirements.
	1.4. Operating parameters are entered as required to meet safety and production requirements.
	1.5. Equipment performance is checked and adjusted according to ***legislative requirements***.
	1.6. Pre-start checks are carried out as required by workplace requirements.
2. Operate and monitor the filling process	2.1. The process is started and operated according to workplace procedures.
	2.2. Equipment is monitored to identify variation in operating conditions.
	2.3. Variation in equipment operation is identified and maintenance requirements are reported according to ***workplace information*** reporting requirements.
	2.4. The ***product preparation*** process is monitored to confirm that filled and closed containers meet specifications.
	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.

	2.8. Workplace records are maintained according to workplace recording requirements.
3. Monitor closure and seaming stage	3.1. The closing stage is monitored to confirm that closures and *can seam components* meet specifications.
	3.2. Out-of-specification *operation of equipment and process* outcomes are identified, rectified and/or reported to maintain the process within specification.
	3.3. The workplace meets housekeeping standards.
	3.4. Workplace records are maintained according to workplace recording requirements.
4. Shut down the filling and closing process	4.1. The appropriate *shutdown procedure* is identified.
	4.2. The process is shut down according to workplace procedures.
	4.3. Maintenance requirements *services* are identified and reported according to workplace requirement.

Variable	Range
Policies and procedures	Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Legislative requirements	relevant to this industry includes: • the Food Standards Code, including labelling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Workplace information	may include: • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • batch/recipe instructions • manufacturers' advice • standard forms and reports
Product preparation	can include: • acidifying • brining or syruping • exhausting
Product	may be hot or cold filled meats
Can seam components	include: • body hook

	• end hook • countersink • seam thickness • seam juncture and overlap
Operation of equipment and processes	may require: • the use of process control panels and systems
Shutdown procedures	may include: • cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)
Services	are appropriate to the process to be operated. Typical examples include: • power • steam • water • vacuum • compressed and instrumentation air

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • conduct pre-start checks on machinery used for filling and closing cans • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • 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	Demonstrates knowledge of: • purpose and basic principles of filling and closing, including the properties and requirements of packaging materials used, hermetic sealing and properties of containers used for this purpose, coding requirements and related legal requirements, such as product weight • the flow of this process and the effect of the filling and seaming process on downstream processes • basic operating principles of equipment, such as main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation

	- quality characteristics of the filled and closed container, including seam components and integrity requirements within level of responsibility for inspection - effect of raw material characteristics on filling and seaming - quality parameters for cans and ends - methods used to prepare product for filling - effect of process variables, such as headspace, fill temperature and vacuum on the process - operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including restart procedures following a crash or jam up - typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - techniques used to monitor the production/packing process, such as inspecting, measuring and testing as required by the process - inspection or test points (control points) in the process and the related procedures and recording requirements - contamination/food safety issues associated with filling and seaming and related control measures - common causes of variation and corrective action required - Occupational Health and Safety (OHS) hazards and controls - requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage - isolation, lock out and tag out procedures and responsibilities - product/process changeover procedures and responsibilities - procedures and responsibility for reporting production and performance information - environmental issues and controls relevant to the process, including waste collection and handling procedures related to the process - basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment - sampling and testing procedures, where relevant, such as seam inspection procedures - cleaning and sanitation procedures where relevant

Underpinning Skills	Demonstrates skills to:
	• access workplace information to identify processing requirements
	• select, fit and use personal protective clothing and/or equipment
	• confirm supply of necessary materials and services
	• prepare/condition product for filling as required
	• conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, selecting appropriate settings and/or related parameters to suit filling requirements, cancelling isolation or lockouts as required, confirming that equipment is clean, correctly configured for filling and seaming requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been completed, and confirming that all safety guards are in place and operational
	• start, operate, monitor and adjust the filling process and equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, such as:
	➢ fill temperatures
	➢ headspace
	➢ vacuum
	➢ visual appearance of the product
	➢ line speed/throughput
	➢ monitor supply and flow of materials to and from the process
	➢ start, monitor and adjust the closer to confirm alignment and formation of the seam
	➢ monitor control points and conduct inspections related to the seaming/closing process, including confirming that coding is correct
	➢ take corrective action in response to out-of-specification results
	➢ conduct product/batch changeovers
	➢ respond to and/or report equipment failure within level of responsibility
	➢ locate emergency stop functions on equipment
	➢ follow isolation and lock out/tag out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
	➢ complete workplace records as required
	➢ demonstrate shift handover procedure
	➢ maintain work area to meet housekeeping standards

	➢ use process control systems according to enterprise procedures
	➢ inspect seams according to enterprise procedures
	➢ collect samples and conduct tests according to enterprise procedures
	➢ clean and sanitise equipment according to enterprise procedures
	➢ use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
	➢ 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: Meat & Meat Products Processing Level II	
Unit Title	**Monitor Meat Temperature from Receival to Sale**
Unit Code	**IND MPP2 10 0613**
Unit Descriptor	This unit covers the skills and knowledge required to monitor temperatures of meat product from the receival area to the display cabinet in a meat retail outlet.

Element	Performance Criteria
1. Monitor temperature of meat product in receival area	1.1. Temperature of received meat product is checked and recorded in line with ***workplace requirements*** to ***monitor temperature***. 1.2. Supervisor is notified when meat product is delivered at a temperature that does not meet workplace, ***hygiene and sanitation*** and ***regulatory requirements***.
2. Monitor temperature of cool room	2.1. Temperature of cool room is checked and recorded to meet workplace, hygiene and sanitation and regulatory requirements. 2.2. Supervisor is notified when cool room temperature does not meet workplace, hygiene and sanitation and regulatory requirements.
3. Monitor display cabinet temperature	3.1. Temperature of display cabinet is checked and recorded to meet workplace, hygiene and sanitation and regulatory requirements. 3.2. Supervisor is notified when display cabinet temperature does not meet workplace, hygiene and sanitation and regulatory requirements.
4. Monitor temperature of meat product while moving between refrigerated storage locations	4.1. Temperature of meat product is monitored while outside of refrigerated ***storage*** areas to comply with workplace, hygiene and sanitation and regulatory requirements. 4.2. Meat product is returned to refrigerated storage quickly and efficiently according to workplace requirements.

Variable	Range
Workplace requirements	may include: • enterprise-specific procedures • using measuring equipment • OHS requirements • Quality Assurance (QA) requirements

	• Standard Operating Procedures (SOPs) • storage times and temperatures • performing task to production requirements • Work instructions.
Monitoring temperatures	may include: • reading temperatures • recording temperatures • reporting unacceptable temperatures, either verbally or in writing • using measuring equipment, such as thermometers and other measuring equipment, which may be digital or analogue • Using mathematical skills appropriate to the task.
Hygiene and sanitation requirements	may include: • relevant government regulations • Workplace requirements.
Regulatory requirements	may include: • Export Control Act • federal, state and territory regulations regarding meat processing and food handling • Relevant Ethiopian standards.
Storage	may include: • chiller • commercial freezer • cool room • display cabinet • personal refrigerator and freezer • refrigerated vehicle

OHS requirements	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE), which may include:
	  ➢ clothing for refrigerated environment
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Explanations	may:
	• be presented orally or in writing using standard formats
	• include information from several sources
	• be presented in diagrammatic, tabular, graphic or pictorial formats
	• require summaries of information for presentation to work colleagues
	• use a range of communications technology and media
	• Use workplace, mathematical and technical language.
Communication	may include:
	• interacting with people from a range of cultural, social and ethnic backgrounds
	• interacting with colleagues, superiors, customers, clients and external parties
	• empathising with customers and work colleagues
	• interpreting the needs of internal and external customers
	• listening and understanding, and speaking clearly and directly
	• reading and interpreting workplace-related documentation
	• the use of negotiation, persuasion and assertiveness skills
	• own work area and the wider work area
	• sharing of information
	• Writing to audience needs.
Mathematical skills	may include:
	• accurate recording of temperature, time, volume, weight and quantity, in standard formats or proformas
	• interpreting and drawing conclusions from routine charts, bar graphs and pie charts
	• operations involving percentages, comparisons and variations
	• reading and interpreting analogue and digital measures, including scales, pressured gauges and thermometers
	• routine estimations and calculations using a range of specified formulas and procedures
	• Using calculators and computer software packages.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to:
	• suitable temperature range for meat product stored in warehouse chillers, transportation, cool rooms and display cabinets
	• effect of incorrect storage temperatures on meat products
	• recommended refrigerated temperature for each product stored

	• measure temperature of meat product and storage areas • advise customers of suitable storage temperatures of meat product
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • suitable temperature range for meat product stored in warehouse chillers, transportation, cool rooms and display cabinets • effect of incorrect storage temperatures on meat products • recommended refrigerated temperature for each product stored • regulatory requirements related to storing meat products • OHS requirements for working in refrigerated areas

Underpinning Skills	Demonstrates skills to:
	• measure temperature of meat product and storage areas, including:
	  ➢ receival area
	  ➢ cool room
	  ➢ display cabinets
	• monitor refrigerated temperatures on a regular basis
	• advise customers of suitable storage temperatures of meat product
	• apply Occupational Health and Safety (OHS) requirements for working in refrigerated areas
	• seek advice from appropriate sources when working with new products
	• explain effect of incorrect storage temperatures on meat products
	• use relevant communication skills
	• use mathematical skills relevant to the task
	• work effectively individually or as part of a team

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: Meat & Meat Products Processing Level II	
Unit Title	**Make and Sell Sausages**
Unit Code	**IND MPP2 11 0613**
Unit Descriptor	This unit covers the skills and knowledge required to make and sell sausages.

Element	Performance Criteria
1. Prepare meat for sausages	1.1. Meat is selected and weighed according to product and **workplace specifications**.
	1.2. Meat is processed in preparation for sausage forming according to **product specifications**.
2. Select ingredients for sausages	2.1. purpose and use of ingredients used in sausage making are identified
	2.2. **Ingredients** are selected and weighed according to product specifications and workplace and **regulatory requirements**.
3. Combine selected ingredients	3.1. Selected ingredients are combined according to **product specifications** and workplace and regulatory requirements.
	3.2. Combined ingredients are checked for the right proportion according to product specification
4. Prepare casings	4.1. **Casings** are prepared according to product specifications.
	4.2. Casings are used and stored according to workplace requirements and health and hygiene requirements.
	4.3. Defective casings are identified and reported where appropriate according to workplace requirements.
5. Fill casings	5.1. Casings are filled to consistency required by product specifications.
	5.2. Defective product is identified and reported, where appropriate, according to workplace requirements.
6. Link, tie and hang sausages	6.1. Sausages are linked and tied to product specifications.
	6.2. Excess casings are trimmed according to product specifications.
	6.3. Sausages are hung or stored according to product specifications and workplace requirements.

7. Prepare, operate, disassemble and clean equipment	7.1. Sausage making equipment is prepared, adjusted and operated to **Occupational Health and Safety (OHS)**, workplace and hygiene requirements, and manufacturer specifications.
	7.2. **Processing equipment** is disassembled and cleaned, and parts are stored in line with OHS, workplace and regulatory requirements, and manufacturer specifications.
8. Sell a variety of sausages	8.1. **Information**, including cooking, storage and serving suggestions, is provided to customers on a **variety of sausages**.
	8.2. Sausage range is promoted to customers according to work place requirements.

Variable	Range
Workplace specifications	may include: • enterprise-specific procedures and ethical standards • Standard Operating Procedures (SOPs) • work instructions
Product specifications may relate to species of meat, which	may include: • beef • mutton • lamb • chicken • veal • pork • game meat • kangaroo • buffalo • emu
Ingredients	may include: • binders • meat • phosphates • preservatives • seasonings, salt or flavourings • Water.
Regulatory requirements	may include: • Export Control Act • Federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • Relevant Ethiopian standards.

Product specifications	may include:
	• according to recipe
	• fat content, which may be measured by:
	  ➢ Chemical Lean (CL)
	  ➢ visual estimation (VL)
	• filling yield
	• iced water
	• individual dry ingredients
	• length of links
	• method and order of blending
	• pre-mix
	• species of meat
	• triple or single link
	• Type and thickness of casing.

Casings	may include: • collagen casings • Natural casings.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Processing equipment	may include: • bowl or silent cutter • mincer and sausage filler.
Information on sausages	may include: • cooking methods for different varieties of sausage • dietary information, including kilojoules per average serving size • identifying allergies associated with ingredients and additives in product

	• identifying ingredients, additives and preservatives in meat product • interpreting nutritional panels • shelf life of different varieties of sausage • Storage and handling of different varieties of sausage.

Variety of sausages	must include:
	• at least two gourmet sausages
	• two other varieties, including:
	  ➢ beef
	  ➢ chicken
	  ➢ game
	  ➢ Italian
	  ➢ lamb
	  ➢ pork
	  ➢ veal

Mathematical skills	may include: • accurate recording of temperature, time, volume, weight and quantity in standard formats or proformas • interpreting and drawing conclusions from routine charts, bar graphs and pie charts • operations involving percentages, comparisons and variations • reading and interpreting analogue and digital measures, including clocks, scales, pressure gauges, thermometers and cash registers • routine estimations and calculations using a range of specified formulas and procedures • Using calculators and computer software packages.
Explanations	may: • be completed with the assistance of others • be directly related to problem solving in own work and work area • be in everyday workplace language and include mathematical language and commonly used technical terms • be presented in writing using standard formats or proformas, diagrams, symbols and charts • be presented orally • Include information from several sources.
Communication skills	may include: • applying mathematical skills to workplace requirements • listening and understanding • reading and interpreting workplace documentation • sharing information

	• speaking clearly and directly
	• Working with diverse individuals and groups.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate: • Competency must be demonstrated over time under typical operating conditions. • The candidate must be able to make at least four varieties of sausages including two gourmet varieties. • Where the candidate cannot make and sell sausages in their usual place of work they must complete the requirements of the unit in an alternative work placement or in a simulated environment. • function and operation of sausage filler machines • safe and correct operation of sausage making equipment • purpose and storage needs of collagen casings and natural casings • purpose and use of ingredients used in sausage making • regulatory requirements in relation to sausage making
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • sausage filler types according to power source • materials for hanging and storing sausages • protective covering for sausages and its purpose • conditions under which equipment may need adjusting • function and operation of sausage filler machines • safe and correct operation of sausage making equipment • cooking methods for a range of sausages, including beef, pork, Italian, veal, gourmet and game varieties • shelf life of a range of sausages, including beef, pork, Italian, veal, gourmet and game varieties • temperature for storing a range of sausages, including beef, pork, Italian, veal, gourmet and game varieties • filling yields of various sizes and types of casings • purpose and storage needs of collagen casings and natural casings • purpose and use of processing equipment used in making sausages • purpose and use of ingredients used in sausage making • relevant OHS requirements • ingredients used in at least four different varieties of sausage • purposes and processes for undertaking emergency stops, machine lockouts and isolation procedures • regulatory requirements in relation to sausage making

	• procedures for cleaning sausage making equipment • properties of correct blending of ingredients

Underpinning Skills	Demonstrates skills to:
	• accurately identify different species and categories of meat used in sausages
	• seek advice from appropriate sources before working with new equipment or products
	• operate adjustment tools and equipment
	• apply mathematical skills relevant to the task
	• make a range of at least four different varieties of sausage
	• report required faults and adjustments, verbally or in writing according to workplace requirements
	• explain cooking methods for a range of sausages, including beef, pork, Italian, veal, gourmet and game varieties
	• answer customer enquiries, for at least four different varieties of sausage, relating to:
	  ➢ cooking methods
	  ➢ cooking times
	  ➢ storage
	  ➢ shelf life
	  ➢ ingredients
	  ➢ nutritional value, including fat content
	• work with team members
	• apply relevant OHS requirements
	• use relevant communication 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: Meat & Meat Products Processing Level II	
Unit Title	**Select/Identify and Prepare Casings**
Unit Code	**IND MPP2 12 0613**
Unit Descriptor	This unit covers the skills and knowledge required to select/ identify and prepare casings.

Element	Performance Criteria
1. Select casings	1.1. Casings are identified according to ***casing specifications***.
	1.2. Casings are selected to suit product requirements.
	1.3. Casings are checked for ***faults*** according to ***workplace requirements***.
2. Prepare casings	2.1. Casings are calibrated according to ***product specifications*** and workplace requirements.
	2.2. Casings are prepared as required according to workplace requirements.
	2.3. Casings are flushed thoroughly with clean water in accordance with workplace requirements.
	2.4. Casings are spooled or pulled into filling tube or nozzle in preparation for further processing.
	2.5. Correct quantity of casings is prepared in accordance with production specifications.
	2.6. Casings are prepared according to Occupational Health and Safety (OHS), and ***hygiene and sanitation requirements***.
	2.7. Casings are stored according to manufacturer specifications and hygiene requirements.

Variable	Range
Casing specifications	may include: • natural • Synthetic.
Possible casing faults	may include: • breakage • contamination • fluctuations in diameter • incorrect label information • poor cleanliness • poor colour

	• tearing • thick ends • weakness • webbing • whiskers • worm holes • Wrong diameter.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Product specifications	may include: • colour • consistency or firmness • shape • size • thickness • Weight.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Hygiene and sanitation requirements	may include: • relevant government regulations • Workplace requirements.
Communication skills	may include: • asking questions

	• communicating with diverse individuals and groups • listening and understanding • reading and interpreting workplace-related documentation • Speaking clearly and directly.
Mathematical skills	may include: • accurate recording of volume, weight and quantity in standard formats and proformas • interpreting and drawing conclusions from routine charts, bar graphs, pie charts, etc • routine estimations and calculations using a range of specified formulas and procedures • Routine estimation and calculation involving percentages, comparisons, variations.
Regulatory requirements	may include: • Export Control Act • federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards • Relevant regulations.

Evidence Guide	
Critical Aspects of Competency	Competency must be demonstrated over time and under typical operating conditions for the enterprise to: • Identify storage requirements of both natural and synthetic casings • Explain purpose of each phase of casing preparation • identify casing size requirements for specific products in regard to length, weight and diameter
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • storage requirements of soaked casings carried over from production • storage requirements of both natural and synthetic casings • filling yield of various sizes and types of casings • purpose of each phase of casing preparation • possible faults in skins and their effect on the product • relevant regulatory requirements
Underpinning Skills	Demonstrates skills to: • identify casing size requirements according to product specifications • identify casing size requirements for specific products in regard to length, weight and diameter

	• prepare casings to product specifications and workplace procedures • identify, remove and report defective product according to workplace procedures • apply relevant communication and mathematics skills • work effectively as an individual and as a member of a team • work to production speed • apply relevant regulatory requirements • take corrective action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practice or technology
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: Meat & Meat Products Processing Level II	
Unit Title	**Pack and Store Meat Product**
Unit Code	**IND MPP2 13 0613**
Unit Descriptor	This unit covers the skills and knowledge required to hand-weigh, arrange, bag and store meat products as required.

Element	Performance Criteria
1. Weigh product	1.1. *Product* is inspected and graded according to *workplace requirements*.
	1.2. Product outside specifications is handled according to workplace requirements.
	1.3. Corrective action is taken according to workplace requirements if product is outside specifications.
	1.4. Product is weighed according to workplace, *hygiene and sanitation*, Quality Assurance (QA) and *regulatory requirements*, where part of work instructions.
2. Arrange, bag and seal product	2.1. Product is arranged according to workplace, hygiene and sanitation, QA and regulatory requirements, where part of work instructions.
	2.2. Product is bagged according to workplace, hygiene and sanitation QA and regulatory requirements, where part of work instructions.
3. Inspect product	3.1. Product is inspected for defects according to workplace, hygiene and sanitation, QA and regulatory requirements, where part of work instructions.
	3.2. Appropriate action is taken for defects according to workplace requirements.
4. Place product into container	4.1. Product is prepared for containers according to workplace, hygiene and sanitation, QA and regulatory requirements.
	4.2. Product is packed into containers according to workplace, hygiene and sanitation, QA and regulatory requirements.
5. Store meat product	5.1. Meat product is stored at the recommended temperature of less than 5°C.
	5.2. Meat product is handled according to hygiene requirements.
	5.3. Meat product is stored according to workplace, regulatory, and hygiene and sanitation requirements.

6. Rotate stock	6.1. Meat product is rotated according to regulatory, hygiene and workplace requirements.
	6.2. Meat product is handled according to ***Occupational Health and Safety (OHS) requirements***.
	6.3. Shelf life of meat product is considered.
7. Maintain clean holding room	7.1. Holding rooms are cleaned according to regulatory, hygiene and workplace requirements.
	7.2. Holding rooms are checked for cleanness routinely according to regulatory, hygiene and workplace requirements.

Variable	Range
Product	may include: • bacon • frankfurts • kabanas and mini kabanas • Sliced product.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Hygiene and sanitation requirements	may include: • relevant government regulations • Workplace requirements.
Regulatory requirements	may include: • Export Control Act • federal and state regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian standards and relevant regulations.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ protective boot covers

	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.
Explanations	may be:
	• completed with the assistance of others
	• directly related to own work area
	• in everyday workplace language, including some mathematical language
	• presented in routine standard proformas using accurately copied information, symbols, numbers, abbreviations, sketches, codes and everyday workplace language
	• presented orally
	• Routine, simple and brief.
Communication skills	may include:
	• interacting with people from a range of cultural, social and ethnic backgrounds
	• listening and understanding
	• The use of communications technology.
Mathematical skills	may include:
	• using calculators and with the assistance of others
	• Recognition and accurate copying of numbers relating to temperature, time, volume, weight and quantity.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to:
	• Undertake inspection and grading of meat prior to packaging and the action to be taken if meat is outside specifications
	• Explain procedures for packing products into containers for a variety of different products
	• bag and seal product to workplace, hygiene and sanitation, and QA requirements
	• explain how a variety of products may need to be arranged in bags
Underpinning Knowledge and Attitudes	Demonstrates knowledge of:
	• labelling requirements
	• inspection and grading of meat prior to packaging and the action to be taken if meat is outside specifications
	• procedures for packing products into containers for a variety of different products
	• requirements for inspecting bagged products and the action to be taken if defects are found

	• requirements related to bagging products • how a variety of products may need to be arranged in bags • relevant OHS requirements
Underpinning Skills	Demonstrates skills to: • inspect and grade of a variety of products prior to packaging • demonstrate the accurate weighing of a variety of products • package and arrange product into two containers according to workplace requirements • bag and seal product to workplace, hygiene and sanitation, and QA requirements • inspect bagged product for defects and take appropriate action for defects • work effectively as an individual and as a member of a team • explain how a variety of products may need to be arranged in bags • apply relevant OHS requirements • make adjustments to own work practice in response to advice from colleagues, new techniques or technology or self-evaluation • use communication and mathematical skills 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: Meat & Meat Products Processing Level II	
Unit Title	**Apply Basic Methods of Meat Cookery and Storage**
Unit Code	**IND MPP2 14 0613**
Unit Descriptor	This unit covers the skills and knowledge required to use a range of cookery methods to prepare meat dishes and store fresh meat and cooked meat products.

Element	Performance Criteria
1. Select and use cooking equipment and technology	1.1. Appropriate **cooking equipment and technology** are selected for particular cooking methods.
	1.2. Equipment is used hygienically, safely and in accordance with manufacturer's instructions.
2. Use methods of meat cookery	2.1. Various **meat cookery methods** are used correctly to prepare dishes to enterprise standard.
	2.2. Correct quantities and ratios of **commodities** are calculated for specific cookery methods.
	2.3. Cooking process is completed in a logical and safe manner based on **workplace requirements**.
	2.4. Problems with the cooking process are identified promptly and corrective action is taken.
	2.5. Dishes are prepared using a range of methods and current technology within acceptable enterprise time frames.
3. Provide information on storage handling and shelf life of fresh meat and cooked meat products	3.1. Information is provided on the storage and shelf life of fresh meat and cooked meat products.
	3.2. Information is provided on the safe and hygienic handling, storage and preparation of meat products according to **OHS requirement**.

Variable	Range
Cooking equipment and technology	• blenders
• electric, gas or induction ranges
• food processors
• grills and griddles
• microwaves
• mixers
• ovens, including combi ovens
• slicers
• Tilting frypan, brat pan.

Methods of meat cookery	must include the following:
	• boiling or simmering
	• braising
	• grilling
	• roasting
	• shallow frying
	• Stewing.
Commodities	may include:
	• general food items such as oils, sauces, condiments and flavourings, garnishes, coatings and batters
	• herbs and spices
	• meat and poultry which may be fresh, frozen, preserved or pre-prepared, and may also include meat products such as standard cuts, sausages, hams, salamis and other meat products.
Workplace requirements	may include:
	• enterprise-specific requirements and ethical standards
	• Standard Operating Procedures (SOPs)
	• Work instructions.
OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	➢ coats and aprons
	➢ head-wear
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.
Explanations	may:
	• be completed with the assistance of others
	• be directly related to own work and work area problem-solving
	• be in everyday workplace language and include mathematical language and commonly used technical terms
	• be presented in writing using standard formats or proformas, diagrams, symbols and charts
	• Be presented orally.
	• Include information from several sources.
Regulatory requirements	may include:
	• Export Control Act

	• Federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • Relevant Ethiopian Standards.
Mathematical skills	may include: • accurate recording of temperature, time, volume, weight and quantity in standard formats or proformas • interpreting and drawing conclusions from routine charts, bar graphs and pie charts • operations involving percentages, comparisons and variations • reading and interpreting analogue and digital measures including clocks, scales, pressure gauges, thermometers, cash registers • routine estimations and calculations using a range of specified formula and procedures • Use of calculators and computer software packages.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace related documentation • sharing information • speaking clearly and directly • Working with diverse individuals and groups.

Evidence Guide	

Critical Aspects of Competency	Must demonstrate:
	• Competency must be demonstrated over time and under typical operating and production conditions for the enterprise.
	• The candidate must be able to cook meat dishes using all the following cooking methods:
	  ➢ boiling or simmering
	  ➢ stewing
	  ➢ braising
	  ➢ roasting
	  ➢ grilling and shallow frying.

Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • effects of different cookery methods on the nutritional value of food • underlying principles of all basic methods of meat cookery • waste minimisation techniques and environmental considerations in relation to different cookery methods

	• logical and time-efficient workflow • use and characteristics of a range of equipment used for the required methods of meat cookery • relevant OHS, regulatory and workplace requirements • major food groups, culinary terminology and equipment as they relate to the required methods of meat cookery
Underpinning Skills	Demonstrates skills to: • identify the most appropriate cooking methods for a range of cuts of meat • select appropriate cooking equipment • follow recipes accurately • apply hygiene and safety principles and procedures during the cooking process • demonstrate safe work practices, particularly in relation to bending, lifting and using cutting implements, appliances, heated surfaces and other equipment which carry a risk of burns • seek advice from appropriate sources when working with new products/equipment • report equipment faults, either verbally or in writing according to workplace requirements • work individually and with other team members • explain logical and time-efficient workflow • apply relevant Occupational Health and Safety (OHS), regulatory and workplace requirements • use mathematical skills relevant to the task • use relevant communication 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: Meat & Meat Products Processing Level II	
Unit Title	**Package Product Using Automatic Packing and Labeling Equipment**
Unit Code	**IND MPP2 15 0613**
Unit Descriptor	This unit covers the skills and knowledge required to pack and label meat product to specifications using automatic packaging and labeling equipment.

Element	Performance Criteria
1. Set up packaging unit for operation	1.1. Workplace start-up procedures are implemented *packaging units* ensuring compliance with Occupational Health and Safety (OHS)and hygiene requirements
	1.2. Consumables are loaded to specifications
	1.3. *Equipment materials* are selected according to *packaging* instructions
	1.4. Faults in equipment are identified and reported either verbally or in writing according to *workplace requirements*.
2. Set weight controls	2.1. Weight controls are set to production requirements ensuring bagged *product* is check-weighed to verify machine set up
	2.2. Controls are adjusted to achieve production specifications.
3. Operate packaging process	3.1. Product is packaged to workplace requirements ensuring process is operated according to OHS, workplace and hygiene requirements, and manufacturer's specifications
	3.2. Packs are checked for damage, sealed and coded to packing requirements.
4. Describe packaged product	4.1. Packaged product is measured according to workplace requirements.
	4.2. Packaged product is labeled according to workplace requirements.
	4.3. Product is packaged according to OHS, hygiene and *regulatory requirements*.

Variable	Range
Packaging units	may include:
	• automatic packaging and labelling equipment

	• manual packaging and labelling • vacuum packaging units

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers
	   ➢ protective hand and arm covering
	   ➢ protective head and hair covering
	   ➢ uniforms
	   ➢ waterproof clothing
	   ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Equipment materials used in wrapping or over wrapping	may include: • clear plastic containers • manual wrapping machine • plastic wrap • polystyrene trays • Wrapping machine (automatic).
Packaging	may include: • boxes • Cartons.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Product	may include: • enterprise product range • satays • Stir-fry mixes.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations

	• requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • State regulations regarding meat processing.
Communication skills	may include: • applying mathematical skills to workplace requirements • listening and understanding • speaking clearly and directly • reading and interpreting workplace-related documentation • Working with diverse individuals and groups.
Mathematical skills and tasks relate to own work and work area problem-solving.	• routine estimation and calculation • percentages • comparisons • variations • use of calculators

Evidence Guide	
Critical Aspects of Competency	Competency must be demonstrated under conditions similar to the speed of production and within the parameters of the role and responsibilities to: • Identify methods of recording production • Explain regulatory requirements related to packaging • Show how to assemble the packaging unit • adjust equipment settings according to packaging instructions or schedules • operate packaging equipment to package products according to manufacturer's specifications, workplace, OHS, hygiene and sanitation requirements
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • methods of recording production • regulatory requirements related to packaging • features of the packaging unit - parts, safety features, start-up and shut-down procedures, possible faults and adjustments • production schedule for automatic packaging and labelling equipment • relevant regulatory requirements
Underpinning Skills	Demonstrates skills to: • assemble the packaging unit • check safety features are in place • check the unit to ensure cleanliness and working order • accurately enter information in labelling equipment • set weight controls

	• load product according to specifications • operate packaging equipment to package products according to manufacturer's specifications, workplace, OHS, hygiene and sanitation requirements • adjust equipment settings according to packaging instructions or schedules • complete packaging and labelling records accurately • package product to customer specifications • identify and report faults in equipment • apply relevant communication and mathematical skills • work effectively as an individual and as part of a team • apply relevant regulatory requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology • use estimation and manual scales to check-weigh product
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: Meat & Meat Products Processing Level II	
Unit Title	**Load out and Dispatch Meat Product**
Unit Code	**IND MPP2 16 0613**
Unit Descriptor	This unit covers the skills and knowledge required to place orders at a dispatch point and load into transportation.

Element	Performance Criteria
1. Arrange and consolidate orders	1.1. Orders picked from separate areas are consolidated.
	1.2. Products and/or batches are placed in correct dispatch area.
	1.3. Information about dispatch scheduling requirements is acquired.
	1.4. Products are arranged and secured.
	1.5. Product is stored in dispatch area according to schedule.
	1.6. Correct methods are used for efficient and safe loading.
2. Load out product	2.1. Product is transported to load out according to Occupational Health and Safety (OHS), *hygiene and sanitation*, Quality Assurance (QA) and *workplace requirements*.
	2.2. Product is loaded according to OHS, hygiene, QA and workplace production requirements.
	2.3. Products are documented and *recorded* according to workplace and production requirements.
	2.4. Product load out is completed according to OHS, QA, and workplace requirements.
3. Maintain clean holding rooms	3.1. Holding rooms are maintained to workplace, *regulatory*, and hygiene and sanitation requirements.
	3.2. Holding rooms are checked for cleanness regularly to workplace, regulatory, and hygiene and sanitation requirements

Variable	Range
OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	➢ coats and aprons
	➢ ear plugs or muffs

	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.
Hygiene and sanitation requirements	may include: • relevant government regulations • Workplace requirements.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Recording of load out documentation	may be: • Manual or electronic.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • regulations and legislation pertaining to the storage of product types • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • State and territory regulations regarding meat processing.
Communication skills	may include: • communicating with people from a range of cultural, social and ethnic backgrounds • listening and understanding • reading and interpreting workplace-related documentation • Speaking clearly and directly.
Mathematical skills	may include: • routine estimation and calculation • percentages • comparisons • variations and use of calculators.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Explain regulatory requirements related to storage and handling of product • identify species and various meat products for storage • use correct manual handling techniques for transferring product to storage facilities • identify temperatures for storage of meat products • apply workplace requirements for despatch of meat
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • storage requirements for products • recording procedures for load out of product • regulatory requirements related to storage and handling of product • temperatures for storage of meat products • workplace requirements for despatch of meat • appropriate storage facilities for individual products
Underpinning Skills	Demonstrates skills to: • identify species and various meat products for storage • handle product according to hygiene requirements • monitor refrigerated temperature on a regular basis • rotate stock • apply relevant communication and mathematical skills • arrange and consolidate orders to customer and workplace requirements • work effectively as an individual and as part of a team • record information accurately and legibly • seek advice where necessary from relevant sources when working with new products, technology or changes in work practices • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology • use correct manual handling techniques for transferring product to storage facilities
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: Meat & Meat Products Processing Level II	
Unit Title	**Process Offals**
Unit Code	**IND MPP2 17 0613**
Unit Descriptor	This unit covers the skills and knowledge required to process offals in meat by-product processing situation.

Element	Performance Criteria
1. Process offal	1.1. Steps involved in processing four types of *offal* are identified and described.
	1.2. Offal is inspected and defects are identified including disease and *contamination*.
	1.3. Offal of connective tissue and other material is trimmed according to workplace and *Occupational Health and Safety (OHS) requirements*.
	1.4. Trim is placed in the appropriate bin or chute according to *workplace requirements*.
	1.5. Types and sources of contamination are identified.
2. Overview runner processing	2.1. Steps are identified in processing the runners.
	2.2. Uses of runners are identified.
	2.3. Runner specifications, defects and grading are identified and explained.
	2.4. Hygiene and sanitation requirements for the runner room are identified and complied with.
	2.5. OHS requirements are identified and complied with for the runner room.
3. Further process tripe	3.1. Tripe is selected, inspected and placed in equipment according to work instructions.
	3.2. Tripe is processed to workplace and Occupational Health and Safety (OHS) requirements.
	3.3. *Further processed* tripe is inspected to ensure it meets customer specifications.
4. Process bibles	4.1. Bibles are trimmed according to workplace requirements and specifications.
	4.2. Defects in bibles including disease and incorrect cutting lines are identified according to workplace requirements.
	4.3. Occupational Health and Safety (OHS) requirements are identified and met.

	4.4. **Trim** is placed in appropriate bin or chute according to workplace requirements.
	4.5. Types and sources of contamination and cross-contamination are identified.
5. recover and store blood	5.1. Blood is recovered hygienically according to work instructions and relevant Standard Operating Procedures (SOPs).
	5.2. Blood is recovered safely according to workplace and Occupational Health and Safety (OHS) requirements.
	5.3. Blood is stored prior to processing according to workplace requirements.
6. Identify steps in processing rendered products	6.1. Flow of waste and processed by-product through the plant is identified.
	6.2. Major items of equipment such as cookers, presses and mills are identified.
	6.3. Major uses of rendered products and customer specifications are explained.
7. Operate meat meal mill	7.1. Meat meal fed into mill feeder bin is monitored.
	7.2. Mill operation is monitored in accordance with workplace requirements*.*
	7.3. Mill operation is monitored in accordance with Occupational Health and Safety (OHS) requirements.
	7.4. Housekeeping is maintained for meat meal mill area.
	7.5. Quality of meat meal is monitored and problems reported in accordance with workplace requirements.
	7.6. Meat meal is produced to workplace requirements and customer specifications.
	7.7. Meat meal samples are taken for testing in accordance with workplace requirements.
8. Monitor, Operate and Maintain waste recovery systems	8.1. System is monitored regularly to ensure solid waste is contained within the system.
	8.2. System is monitored to ensure it complies with environmental and workplace requirements.
	8.3. Environmental impact of systems failure is identified.
	8.4. Corrective action is taken in response to systems failure in accordance with workplace and **regulatory requirements**.

	8.5. System is operated and monitored according to workplace requirements.
	8.6. Material is recovered from waste water according to workplace requirements.
	8.7. Material is disposed of in accordance with workplace requirements.
	8.8 Waste recovery system is maintained in accordance with workplace requirements and manufacturer's specifications
9. Pack and Dispatch rendered products	9.1. Rendered products are inspected to workplace requirements prior to packaging.
	9.2. Rendered products are packaged to workplace requirements using correct packaging procedures and effective storage materials.
	9.3. Meat meal is packaged in bulk and/or bags, if applicable.
	9.4. Packaging and labeling is checked in accordance with customer specifications.
	9.5. Packaged products are palletized where required.
	9.6. Rendered products are packaged to Occupational Health and Safety (OHS) requirements.
	9.7. Products are labeled accurately, to customer specifications, in preparation for *storage*, sales or distribution.
	9.8. Products are transferred to storage areas.
	9.9. Packaged products are dispatched.
10. Monitor, Operate and Maintain air filtration and waste recovery system	10.1. System is monitored regularly to ensure odors are contained within the system.
	10.2. System is monitored to ensure it complies with environmental and workplace requirements.
	10.3. Environmental impact of systems failure is identified.
	10.4. Corrective action is taken in response to systems failure in accordance with workplace and regulatory requirements.
	10.1. System is operated and monitored in accordance with workplace requirements and manufacturer's specifications.
	10.1. Air filtration system is maintained in accordance with workplace requirements and manufacturer's specifications.

Variable	Range
Offal	may include: • Brains • head meat • kidney • lips • liver • oesophagus • pancreas • pituitary glands • pizzles • rectum • runners • sweet runners • tail • tendons • testicles • tongue root and tongue • trachea • uterus • Weasand.
Contaminants	may include: • abscess • blood disease (such as OJD, Bovine John's Disease (BJD), etc) • Ingesta and Tumour.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice etc.

Workplace requirements	may include:
	• enterprise-specific requirements
	• OHS requirements
	• Quality Assurance (QA) requirements
	• Standard Operating Procedures (SOPs)
	• the ability to perform the task to production requirements
	• Work instructions.
Further processing equipment	may include:
	• cookers
	• washers
Trim	may:
	• have different specifications
Regulatory requirements	may include:
	• Export Control Act
	• federal, state and territory regulations regarding meat processing
	• hygiene and sanitation requirements
	• relevant Ethiopian Standards
	• relevant regulations
	• requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption
	• Requirements set out in Ethiopian Standard for Animal Tissues and their Derivatives Utilised in the Manufacture of Medical Devices - Controls on Sourcing, Collection and Handling.
Storage	may include:
	• bulk bin or bagging of dry material
	• heated bulk tanks for wet material
	• Sterile refrigerated bottles.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to:
	• Identify sources of contamination and cross-contamination
	• Explain hygiene and sanitation requirements related to processing offal
	• Explain OHS requirements related to processing offal
	• identify contamination and defects and take corrective action
	• identify defects in offal including disease (including Ovine John's Disease (OJD)), parasite damage and contamination

Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • hygiene and sanitation requirements related to processing offal • OHS requirements related to processing offal • relevant regulatory requirements • sources of contamination and cross-contamination
Underpinning Skills	Demonstrates skills to: • identify contamination and defects and take corrective action • identify defects in offal including disease (including Ovine John's Disease (OJD)), parasite damage and contamination • work efficiently in teams and individually • apply relevant regulatory requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology • wash offal (where required) according to workplace requirements
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: Meat & Meat Products Processing Level II	
Unit Title	**Process Pet Meat and Blood**
Unit Code	**IND MPP2 18 0613**
Unit Descriptor	This unit covers the skills and knowledge required to process and pack pet meat and blood either in an abattoir or knackery.

Element	Performance Criteria
1. Examine meat and offal for pet meat	1.1. Meat and **offal** for pet meat are inspected for **abnormalities or defects**.
	1.2. Abnormalities or defects are identified and appropriate action is taken according to **workplace requirements**.
	1.3. Infected or affected products are isolated for disposal according to **regulatory requirements** and workplace requirements
2. Prepare meat and offal for pet meat	2.1. Meat and offal are prepared for pet consumption or further processing in accordance with regulatory and workplace requirements.
	2.2. Product is trimmed and processed to meet customer specifications.
3. Package and store pet meat	3.1. Pet meat is packaged in tubs, bins or containers in accordance with regulatory and workplace requirements, and customer specifications.
	3.2. Pet meat is stored in accordance with workplace requirements.
4. Process blood	4.1. Pre-operational checks on equipment are performed to workplace requirements.
	4.2. Blood is processed according to workplace requirements for hygiene.
	4.3. Blood is processed safely according to workplace OHS policies and procedures.
5. Pack and store blood products	5.1. Blood is packed hygienically according to workplace requirements.
	5.2. Packaged blood **products** are stored according to workplace requirements and customer **specifications**.

Variable	Range
Offal	may include:
	• bones

	• brain • cheek • chitterlings • diaphragm • fat (tallow) • glands • heart • kidney • liver • lungs • small intestines • stomach • tail • tendons • tongue • tripe.
Abnormalities or defects	may include: • abscesses • grass seeds • parasite damage • pathological lesions.
Workplace requirements	may include: • disposal of waste products • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures • the ability to perform the task to production requirements • Work instructions.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • state regulations regarding meat processing.
Products	may include: • blood • fertiliser • meat or meat and bone meal • Tallow.
Specifications according to:	may vary • Customer and workplace requirements.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	➢ coats and aprons
	➢ ear plugs or muffs
	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ mesh aprons
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Identify types of meat used for pet meat • Explain workplace and regulatory requirements related to the processing, packaging and storage of pet meat • identify abnormalities or defects and take appropriate corrective action
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • types of meat used for pet meat • workplace and regulatory requirements related to the processing, packaging and storage of pet meat • OHS requirements for the processing of pet meat
Underpinning Skills	• process meat and offal for pet food in accordance with work instructions, regulatory requirements and customer specifications • process meat and offal for pet food to workplace requirements • identify abnormalities or defects and take appropriate corrective action • package and store pet food in accordance with regulatory, customer and workplace requirements • comply with Occupational Health and Safety (OHS)requirements for the processing of pet meat • work effectively as an individual and as part of a team • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology

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: Meat & Meat Products Processing Level II	
Unit Title	**Operate Tenderiser and Mincer**
Unit Code	**IND MPP2 19 0613**
Unit Descriptor	This unit covers the skills and knowledge required to operate and maintain machinery for tenderizing and mincing meat cuts.

Element	Performance Criteria
1. Operate tenderiser	1.1. Tenderiser is operated and maintained according to ***Occupational Health and Safety (OHS) requirements*** and manufacturer's specifications.
	1.2. Meat is tenderised to ***workplace requirements***.
	1.3. Potential sources of contamination are identified and contamination is managed according to workplace requirements.
	1.4. Flow of product is monitored according to workplace and Quality Assurance (QA) requirements.
2. Mince meat	2.1. Mincer is operated in accordance with workplace requirements and manufacturer's specifications.
	2.2. Mincer is operated in accordance with Occupational Health and Safety (OHS) requirements.
	2.3. Input and output are monitored to ensure compliance with Quality Assurance (QA) requirements.
3. Maintain mincer	3.1. Mincer start-up procedures are followed in accordance with work instructions.
	3.2. Routine maintenance and cleaning are performed in accordance with work instructions.

Variable	Range

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE):
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers
	   ➢ protective hand and arm covering

	➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear • requirements set out in standards and codes of practice
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • regulations regarding meat processing

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • monitor meat input and output in accordance with work instructions • identify basic operating principles of meat tenderisers • explain OHS requirements related to meat tenderising
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • basic operating principles of meat tenderisers • OHS requirements related to meat tenderising • work instructions for operating tenderiser • relevant regulatory requirements • potential sources of contamination to the product
Underpinning Skills	Demonstrates skills to: • operate tenderiser in accordance with workplace requirements and manufacturer's specifications • monitor meat input and output in accordance with work instructions • carry out routine cleaning and maintenance in accordance with work instructions, manufacturer's specifications and hygiene and sanitation requirements • work effectively as an individual and as part of a team • apply relevant regulatory requirements

	• take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level II	
Unit Title	**Operate Rendering Machines**
Unit Code	**IND MPP2 20 0613**
Unit Descriptor	This unit covers the skills and knowledge required to operate a hogger to transport raw materials for rendering operations and other rendering machines.

Element	Performance Criteria
1. Deliver material to feeder bins	1.1. Material is delivered to feeder bins in accordance with ***workplace requirements***.
	1.2. Material is delivered to feeder bins in accordance with Occupational Health and Safety (OHS) ***requirements*** and in particular, in accordance with manual handling requirements.
	1.3. Delivery of meat waste is monitored in accordance with workplace requirements.
	1.4. Condemned carcasses are dealt with promptly.
	1.5. Housekeeping requirements are followed in relation to work area.
2. Operate hogger	2.1. Hogger is operated in accordance with manufacturer's and workplace requirements.
	2.2. Hogger is operated in accordance with OHS requirements.
	2.3. Flow of waste material to rendering plant is maintained to keep adequate levels in holding or feeder bins.
	2.4. Problems associated with waste or hogger operation are promptly corrected or reported to supervisor.
	2.5. Routine maintenance and cleaning is carried out in accordance with workplace requirements.
3. Monitor l receival bin sand Check equipment	3.1. Filling and emptying of raw material receival bins is monitored to prevent overfilling and to clear any blockages in drainage in accordance with workplace requirements.
	3.2. Size reduction equipment is checked for wear in accordance with workplace requirements
4. Operate metal detector (wet rendering) or magnet (dry rendering)	4.1. Metal detector and magnet sensitivity is checked regularly.
	4.2. Metal detector or magnet is operated in accordance with workplace requirements.
	4.3. Metal is removed from magnet or product.

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Regulatory requirements	may include: • Export Control Act • federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in AS 5008:2001 Ethiopian Standard for the Hygienic Rendering of Animal Products • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.
Communication skills	may include: • listening and understanding • sharing information • speaking clearly and directly • working with diverse individuals and groups.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Identify disposal arrangements for condemned car cases • explain flow requirements of the by-products processing plant • explain waste specifications • explain how the hogger works • apply maintenance requirements related to the hogger • identify OHS requirements related to the hogger
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • how the hogger works • maintenance requirements related to the hogger • OHS requirements related to the hogger • reporting procedures for problems related to the hogger • flow requirements of the by-products processing plant • waste specifications • relevant regulatory requirements • disposal arrangements for condemned car cases • emergency switches and shut-down procedures
Underpinning Skills	Demonstrates skills to: • to operate the hogger in accordance with manufacturer's specifications and workplace requirements • follow work instructions for the operation of the hogger • monitor flow of waste • follow OHS requirements • keep area neat and tidy • monitor machinery gauges where fitted • undertake routine maintenance and cleaning as specified in work instructions • work effectively as an individual and as part of a team • apply relevant regulatory requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology • use relevant communication 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: Meat & Meat Products Processing Level II	
Unit Title	**Comply with Quality Assurance and HACCP Requirements**
Unit Code	**IND MPP2 21 0613**
Unit Descriptor	This unit covers the skills and knowledge required to apply Quality Assurance (QA) procedures and Hazard Analysis and Critical Control Points (HACCP) requirements in a meat industry establishment.

Element	Performance Criteria
1. Identify hazards and control points	1.1. Hazards to food safety and quality are identified for own work area according to ***workplace*** and ***regulatory requirements***.
	1.2. Control points for own work area are identified according to workplace requirements.
2. Identify elements of the Quality Assurance *(*QA*)* system	2.1. Purpose and ***elements of the QA*** and Hazard Analysis Critical Control Point (HACCP) systems are identified and related to workplace requirements.
	2.2. Product specifications for own work area are identified.
3. Follow requirements of a HACCP=based QA system	3.1. Workplace requirements of the HACCP systems are identified and followed.
	3.2. Non-conforming products are ***communicated*** to supervisor where this forms part of workplace requirements.
	3.3. Consequences of not following workplace requirements are explained.
4. Identify quality control practices in a HACCP-based QA system	4.1. ***Measures for monitoring quality control*** are identified.
	4.2. Inspection and re-inspection procedures are identified.
5. Inspect own work	5.1. ***Inspection of own work*** is carried out as prescribed in workplace requirements.
	5.2. ***Corrective action*** is taken according to workplace requirements.

Variable	Range
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • QA requirements

	- SOPs - the ability to perform the task to production requirements - Work instructions.
Regulatory requirements	may include: - Export Control Act - Federal, state and territory regulations regarding meat processing - hygiene and sanitation requirements - relevant Ethiopian Standards - relevant regulations - Requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.
Elements of the QA system	may include: - corrective action - HACCP charts - mission statements - monitoring procedures - SOPs - Work instructions.
Communication	may be: - spoken, written, non-verbal and include signs and signals - With people from a range of cultural social and ethnic backgrounds or with colleagues, superiors, customers, clients and external parties.
Measures for monitoring quality control	may include: - receival procedures - Temperature monitoring program.
Inspecting own work	may: - include sending sample for testing - Be visual.
Corrective action	may include: - condemnation - reporting procedures - Trimming.

OHS requirements	may include:
	- enterprise OHS policies, procedures and programs
	- OHS legal requirements
	- Personal Protective Equipment (PPE)which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance

	➢ mesh aprons ➢ protective boot covers ➢ protective hand and arm covering ➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear • Requirements set out in standards and codes of practice.
Work instructions, standard operating procedures, explanations and reports	may: • be in everyday workplace language, including some mathematical language • be presented in routine proformas using accurately copied information, symbols, numbers, abbreviations, codes and sketches • be presented orally • be routine, simple and brief • Include the use of visual aids (e.g. videos, OHS signs, symbols and other pictorial presentations).

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • corrective actions relevant to critical control points • nature of food safety hazards • purpose of a HACCP program
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • corrective actions relevant to critical control points • nature of food safety hazards • purpose of a HACCP program • requirements for, and the nature of a HACCP plan • regulatory requirements relevant to own work area • nature and importance of work instructions, Standard Operating Procedures (SOPs), explanations and reports • potential risk, loss or damage if the required actions are not performed • control points for a specific task or activity and how hazards are controlled • hazards to food safety and quality for specific work areas • reasons for quality control, such as inspection and sampling
Underpinning Skills	Demonstrates skills to: • comply with regulatory requirements • determine critical control points • follow workplace requirements related to HACCP and QA • identify hazards to food safety • inspect own work

	• identify and apply relevant Occupational Health and Safety (OHS) requirements • monitor critical control points • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level II	
Unit Title	**Maintain Production Records and Present Data**
Unit Code	**IND MPP2 22 0613**
Unit Descriptor	This unit covers the skills and knowledge required to maintain records of throughput required for workplace and regulatory agencies by the stock person, boning room or chiller clerk, or the person responsible for maintaining small goods production records. It covers major record-keeping, report generating activities and present data.

Element	Performance Criteria
1. Prepare production records	1.1. ***Workplace*** and ***regulatory requirements*** for ***record-keeping*** are identified.
	1.2. ***Production recording*** equipment or materials are prepared in accordance with work instructions.
	1.3. Records are updated on an electronic or manual system in accordance with work instructions.
	1.4. Shortcomings of the recording system are corrected if applicable.
2. Generate reports and present data	2.1. Data summaries and reports are prepared in accordance with workplace requirements
	2.2. Major reports are generated detailing inventory, production or staffing data.
3. Record and check data	3.1 Data is entered into laboratory information system or record sheets as directed
	3.2. Data is checked to identify transcription errors or atypical entries
	3.3. Errors in data are rectified using enterprise procedures
4. Calculate simple scientific quantities	4.1. Simple scientific quantities are calculated using given formulae and data
	4.2. Calculated quantities are ensured to be consistent with estimations and expectations
	4.3. All calculated quantities are reported with appropriate precision and units
5. Present data in tables, charts, graphs and Store data	5.1. Data is presented accurately in tables and charts using given formats and scales
	5.2. Obvious features and trends in data are recognized and reported

| | 5.1. Data is filed and stored in accordance with enterprise procedures |
| | 5.2. Enterprise confidentiality standards are maintained |

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • hygiene and sanitation requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • Work instructions.
Regulatory requirements	may include: • domestic or importing country requirements • Export Control Act • hygiene and sanitation requirements • relevant regulations and Ethiopian Standards • regulations regarding meat processing.
Record-keeping	can be: • computer based, such as auto labelling systems or bar code scanners • manual, including the provision of summaries.
Production records	may include: • boning room production intake records whether recorded manually or by scanner • boning room production recorded manually or by automatic labelling machine • chiller assessment recording • employee attendance monitoring and recording if applicable in addition to clock card • European Union program monitoring recording • kill floor grading and recording systems such as Sastek • load out records recorded manually or by scanner • pesticide residue monitoring and recording • recording associated with approved arrangements • recording associated with inventory control • recording associated with Quality Assurance (QA) monitoring • re-pack processing and recording for inventory control • Stock receival and identification records.
OHS requirements	may include: • enterprise OHS policies, procedures and programs

	• OHS legal requirements
	• Personal Protective Equipment (PPE) may include:
	➢ coats and aprons
	➢ ear plugs or muffs
	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ mesh aprons
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.
Communication skills	may include:
	• communicating and working with diverse individuals and groups
	• listening and understanding
	• interpreting the needs of internal and external customers
	• reading and interpreting workplace documentation
	• speaking clearly and directly
	• sharing information.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to:
	• Explain workplace requirements for reports
	• Identify relevant security arrangements
	• possible shortcomings of recording and how to correct
	• Explain purposes of keeping production records
	• apply relevant communication and mathematical skills
	• use all recording equipment properly
Underpinning Knowledge and Attitudes	Demonstrates knowledge of:
	• workplace requirements for reports
	• relevant security arrangements such as Ethiopian Quarantine Inspection Service (EQIS) or company requirements
	• function and uses of the reports generated
	• possible shortcomings of recording and how to correct them
	• purposes of keeping production records
	• relevant OHS requirements
Underpinning Skills	Demonstrates skills to:
	• follow all work instructions effectively

	- generate reports to meet workplace and regulatory requirements - apply relevant Occupational Health and Safety (OHS) requirements - maintain stocks of consumables for use - prepare all recording equipment for use (where relevant) - use all recording equipment properly (where relevant) - record data according to data requirements - update records as required - prepare all summaries required - apply relevant communication and mathematical skills - work effectively as an individual and as part of a team - describe the workplace and/or regulatory requirements for record-keeping - take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level II	
Unit Title	**Participate in Workplace Communication**
Unit Code	**IND MPP2 23 0613**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

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

	3.4 Errors in recording information on forms/ documents are identified and properly acted upon.
	3.5 Reporting requirements to supervisor are completed according to organizational guidelines.

Variable	Range
Appropriate sources	May include but not limited to: • Team members • Suppliers • Trade personnel • Local government • Industry bodies
Medium	May include but not limited to: • Memorandum • Circular • Notice • Information discussion • Follow-up or verbal instructions • Face to face communication
Storage	May include but not limited to: • Manual filing system • Computer-based filing system
Protocols	May include but not limited to: • Observing meeting • Compliance with meeting decisions • Obeying meeting instructions
Workplace interactions	May include but not limited to: • Face to face • Telephone • Electronic and two way radio • Written including electronic, memos, instruction and forms, non-verbal including gestures, signals, signs and diagrams
Forms	• Personnel forms, telephone message forms, safety reports

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge to: • Prepare written communication following standard format of the organization • Access information using communication equipment • Make use of relevant terms as an aid to transfer information effectively • Convey information effectively adopting the formal or informal communication

Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • Effective communication • Different modes of communication • Written communication • Organizational policies • Communication procedures and systems • Technology relevant to the enterprise and the individual's work responsibilities
Underpinning Skills	Demonstrate skills to: • Follow simple spoken language • Perform routine workplace duties following simple written notices • Participate in workplace meetings and discussions • Complete work related documents • Estimate, calculate and record routine workplace measures • Do basic mathematical processes of addition, subtraction, division and multiplication • relate to people of social range in the workplace • Gather and provide information in response to workplace Requirements
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • 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: Meat & Meat Products Processing Level II	
Unit Title	Work in Team Environment
Unit Code	**IND MPP2 24 0613**
Unit Descriptor	This unit covers the skills, knowledge and attitudes to identify role and responsibility as a member of a team.

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

Variable	Range
Role and objective of team	May include but not limited to: • Work activities in a team environment with enterprise or specific sector • Limited discretion, initiative and judgment maybe demonstrated on the job, either individually or in a team environment
Sources of information	May include but not limited to: • Standard operating and/or other workplace procedures

	• Job procedures
	• Machine/equipment manufacturer's specifications and instructions
	• Organizational or external personnel
	• Client/supplier instructions
	• Quality standards
	• OHS and environmental standards
Workplace context	May include but not limited to:
	• Work procedures and practices
	• Conditions of work environments
	• Legislation and industrial agreements
	• Standard work practice including the storage, safe handling and disposal of chemicals
	• Safety, environmental, housekeeping and quality guidelines

Evidence Guide	
Critical Aspects of competence	Demonstrates skills and knowledge to:
	• Operate in a team to complete workplace activity
	• Work effectively with others
	• Convey information in written or oral form
	• Select and use appropriate workplace language
	• Follow designate work plan for the job
	• Report outcomes
Underpinning Knowledge and Attitude	Demonstrate knowledge of:
	• Communication process
	• Team structure
	• Team roles
	• Group planning and decision making
Underpinning Skills	Demonstrate skills to:
	• Communicate appropriately, consistent with the culture of the workplace
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through:
	• 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: Meat & Meat Products Processing Level II	
Unit Title	**Develop Business Practice**
Unit Code	**IND MPP2 25 0613**
Unit Descriptor	This unit specifies the outcomes required to establish a business operation from a planned concept. It includes researching the feasibility of establishing a business operation, planning the setting up of the business, implementing the plan and reviewing operations once commenced.

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

4. Implement establishment plan	4.1 Marketing of business operation is undertaken.
	4.2 Physical and human resources are obtained to implement business operation.
	4.3 **Operational unit** is established to support and coordinate business operation.
	4.4 Monitoring process is developed and implemented for managing operation.
	4.5 **Legal documents** are carefully maintained and relevant records are kept and updated to ensure validity and accessibility.
	4.6 Contractual procurement rights for goods and services including **contracts with relevant people**, negotiated and secured as required in accordance with the business plan.
	4.7 Options for leasing/ownership of business premises identified and contractual arrangements are completed in accordance with the business plan.
5. Review implementation process	5.1 Review process for implementation of business operation is developed and implemented.
	5.2 Improvements in business operation and associated management process are identified.
	5.3 Identified improvements are implemented and monitored for effectiveness.

Variable	Range
Business opportunities	May include but not limited to: • expected financial viability • skills of operator • amount and types of finance available • returns expected or required by owners • likely return on investment • finance required and lifestyle issues
Business viability	May include but not limited to: • opportunities available • market competition • timing/ cyclical considerations • skills available • resources available • location and/ or premises available • risk related to a particular business opportunity, especially • in regard to Occupational Health and Safety and • environmental considerations

Specialist and relevant parties	May include but not limited to: • Chamber of commerce • Financial planners and financial institution representatives, business planning specialists and marketing specialists • accountants • lawyers and providers of legal advice • government agencies • industry/trade associations • online gateways • business brokers/business consultants
Personal skills/attributes	May include but not limited to: • technical and/ or specialist skills • business knowledge and skills • entrepreneurship • willingness to take risks
Business risks	May include but not limited to: • occupational health and safety and environmental • considerations • relevant legislative requirements • security of investment • market competition • security of premises/ location • supply and demand • resources available
Human and physical resources	May include but not limited to: • software and hardware • office premises • communications equipment • specialist services through outsourcing, contracting and • consultancy • staff and vehicles
Operational unit	May include but not limited to: • office location staffed with required personnel and equipped to service and support business • home-based site or other location such as leased or owned property
Legal documents	May include but not limited to: • partnership agreements, constitution documents, statutory books for companies (Register of Members, Register of Directors and Minute Books), Certificate of Incorporation, Franchise Agreements and financial documentation, appropriate software for financial records • recordkeeping including personnel, financial, taxation, OHS and environmental

Contracts with relevant people	May include but not limited to:
	• owners, suppliers, employees, landlords, agents, distributors, customers or any person with whom the business has, or seeks to have, a performance-based relationship

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge in:
	• that a business operation has been planned and implemented from initial research into feasibility of the business and completion of the plan, through to implementing the plan and commencing operations
	• the ability to evaluate the results of research and assess the likely viability and practicability of a business opportunity, taking into account the current business/market climate and resources available
Underpinning Knowledge and Attitudes	Demonstrate knowledge of:
	• Federal and regional government legislative requirements affecting business operations, especially in regard to Occupational Health and Safety (OHS), Equal Employment Opportunity (EEO), industrial relations and anti-discrimination
	• Technical or specialist skills relevant to the business operation
	• Financing options
	• Business systems and operations
	• Relevant marketing, management, sales and financial concepts
	• Methods for researching business opportunities
	• Principles of risk management relevant to the business
	• Methods of identifying relevant specialist services to complement the business
	• Forms and administrative systems
	• Services available and charges
	• Planning and control systems (sales,
	• Advertising and promotion, distribution and logistics
	• Financial recording systems
	• Legal rights and responsibilities
	• Record keeping duties
	• Operational factors relating to the business (provision of professional services, products)
Underpinning Skills	Demonstrate skills of:
	• Literacy skills to interpret legal requirements, company policies and procedures and immediate, day-to-day demands
	• Marketing skills
	• Business planning skills

	• Entrepreneurial skills
	• Problem-solving skills
	• OHS skills
	• Time management skills
	• Belief in services and products offered by the business
	• Communication skills including questioning, clarifying, reporting, and giving and receiving constructive feedback
	• Technical and analytical skills to interpret business documents, reports and financial statements and projections
	• Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
	• Problem solving skills to develop contingency plans
	• Using computers and software packages to record and manage data and to produce reports
	• Literacy skills to enable interpretation of business information, numeracy skills for data analysis to aid research
	• Research skills to identify a business opportunity and to conduct a feasibility study
	• Analytical skills to assess personal attributes and to identify business risks
	• Observation skills for identifying appropriate people, resources and to monitor work
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • 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: Meat & Meat Products Processing Level II	
Unit Title	**Standardize and Sustain 3S**
Unit Code	**IND MPP2 26 0613**
Unit Descriptor	This unit of competence covers the knowledge, skills and attitudes required by worker to standardize and sustain 3S to his/her workplace. It covers responsibility for the day- to-day operations of the workplace and ensuring that continuous improvements of Kaizen elements are initiated and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	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 **Safety equipment and tools** are identified and checked for safe and effective operation.
	1.5 **Tools and equipment** are prepared and used to implement 3S.
2. Standardize 3S.	2.1 Plan is prepared and used to standardize 3S activities.
	2.2 **Tools and techniques** to standardize 3S are prepared and implemented based on **relevant procedures**.
	2.3 Checklists are followed for standardize activities and **reported** to **relevant personnel**.
	2.4 The workplace is kept to the specified standard.
	2.5 Problems are avoided by standardizing activities.
3. Sustain 3S.	3.1 Plan is prepared and followed to standardize 3S activities.
	3.2 **Tools and techniques** to sustain 3S are discussed, prepared and implemented based on relevant procedures.
	3.3 Workplace is inspected regularly for compliance to specified standard and sustainability of 3S techniques.
	3.4 Workplace is cleaned up after completion of job and before commencing next job or end of shift.
	3.5 Situations are identified where compliance to standards is unlikely and actions specified in procedures are taken.
	3.6 Improvements are recommended to lift the level of compliance in the workplace.

	3.7 Checklists are followed to sustain activities and reported to relevant personnel.
	3.8 Problems are avoided by sustaining activities.

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 equipment	May include but not limited to: • paint • hook • sticker • signboard • nails • shelves • chip wood • sponge • broom • pencil • shadow board/ tools board
Tools and techniques	May include but not limited to: • 5S Job Cycle Charts • Visual 5S

	• The Five Minute 5S
	• Standardization level checklist
	• 5S checklist
	• The five Whys and one How approach(5W1H)
	• Suspension
	• Incorporation and Use Elimination
Relevant procedures	May include but not limited to:
	• Assign 3S responsibilities
	• Integrate 3S duties into regular work duties
	• Check on 3S maintenance level
	• OHS measures such as signage, symbols / coding and labeling of workplace and equipment
	• Creating conditions to sustain your plans
	• Roles in implementation
Reporting	May include but not limited to:
	• verbal responses
	• data entry into enterprise database
	• brief written reports using enterprise report formats
Relevant personnel	May include but not limited to:
	• supervisors, managers and quality managers
	• administrative, laboratory and production personnel
	• internal/external contractors, customers and suppliers
Tools and techniques	May include but not limited to:
	• 5S slogans
	• 5S posters
	• 5S photo exhibits and storyboards
	• 5S newsletter
	• 5S maps
	• 5S pocket manuals
	• 5S department/benchmarking tours
	• 5S months
	• 5S audit
	• Awarding system
	• Big cleaning day
	• Patrolling system may include:
	➢ Top management Patrol
	➢ 5S Committee members and Promotion office Patrol
	➢ Mutual patrol
	➢ Self-patrol
	➢ Checklist and Camera patrols

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to:
	• Discuss the relationship between Kaizen elements.

	• Standardize and sustain 3S activities by applying appropriate tools and techniques.
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Elements of Kaizen • Ways to improve Kaizen elements • Benefits of improving kaizen elements • Relationship between Kaizen elements • The fourth pillar of 5S • Benefits of standardizing and sustaining 3S • Procedures for standardizing and sustaining 3S activities • Tools and techniques to sustain 3S • Relevant Occupational Health and Safety (OHS) and environment requirements • Plan and report • Method of communication
Underpinning Skills	Demonstrates skills of: • improving Kaizen elements by applying 5S • standardizing and sustaining procedures and techniques to avoid problems • technical drawing • procedures to standardizing 3S activities • analyzing and preparing shop layout of the workplace • standardizing and sustaining checklists • preparing and implementing tools and techniques to sustain 3S • working with others • reading and interpreting documents • observing situations • solving problems by applying 5S • communication skills • preparing labels, slogans, etc. • gathering evidence by using different means • using Kaizen board properly in accordance the procedure • reporting activities and results using report formats
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	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.

NTQF Level III

Occupational Standard: Meat & Meat Products Processing Level III	
Unit Title	**Sort and Batch Meat**
Unit Code	**IND MPP3 01 0613**
Unit Descriptor	This unit covers the skills and knowledge required to select and sort meat products to specification in a meat establishment.

Element	Performance Criteria
1. Sort products	1.1. Products are correctly selected by ***specification*** according to customer and ***workplace requirements***.
	1.2. Contaminated products are identified and dealt with according to workplace and ***hygiene requirements***.
	1.3. ***Products*** are correctly sorted by specification according to workplace requirements.
2. Classify products	2.1. Products are accurately measured to specification according to workplace requirements.
	2.2. Products are described to specification according to workplace requirements.
3. Select sorted meat	3.1. Sorted ***meat*** is selected by type according to product and customer specifications.
	3.2. Sorted meat is selected according to ***Occupational Health and Safety (OHS)***, and hygiene and sanitation requirements*.*
	3.3. Correct meat, by-product and stock are selected according to the formulation specification and workplace requirements*.*
4. Prepare batched meat	4.1. Scales are calibrated in accordance with product specifications and workplace requirements.
	4.2. Meat is placed in appropriate containers and is weighed according to production specifications.
	4.3. Meat is batched according to workplace hygiene requirements.
5. Record usage of meat	5.1. Meat is stored in accordance with workplace, OHS, and hygiene and sanitation requirements.
	5.2. Usage of meat is recorded in accordance with workplace and ***regulatory requirements***.

Variable	Range
Specifications	may be defined by: • customer specifications

	• industry standards • Workplace procedures.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Hygiene requirements	may include: • relevant government regulations • workplace requirements.
Product	may be sorted according to: • age of meat • amount of fat • any blemishes • color and texture of fat • color of meat • conformation • differentiation of classes • sex • texture of meat • weight.
Types of meat	may include: • beef • grain-fed or grass-fed beef • lamb • mutton • pork • veal • other approved species.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers
	   ➢ protective hand and arm covering

	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice
	• safety precautions such as:
	  ➢ accident prevention
	  ➢ electrical fault
	  ➢ emergency evacuation
	  ➢ emergency procedures in case of injury
	  ➢ equipment malfunction.

Regulatory requirements	may include: • Export Control Act • federal and state regulations regarding meat processing • relevant Ethiopian Standards • relevant regulations.
Explanations	may: • be presented orally, in writing using standard formats, or using a range of communications technology and media • include information from several sources • present information in diagrammatic, tabular, graphic or pictorial formats • require summaries of information for presentation to work colleagues • use workplace, mathematical and technical language.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly • working with diverse individuals and groups.

Evidence Guide	
Critical Aspects of Competency	Competency must be demonstrated over time and under typical operating and production conditions for the enterprise to: • Explain hygiene requirements for sorting meat • Identify likely contaminants • identify a range of meat cuts related to sorting meat
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • hygiene requirements for sorting meat • likely contaminants

	• regulatory requirements • workplace requirements for sorting meat

Underpinning Skills	Demonstrates skills to:
	• identify a range of meat cuts related to sorting meat
	• sort and classify meat products to:
	    ➢ customer requirements
	    ➢ hygiene and sanitation requirements
	    ➢ quality requirements
	    ➢ Occupational Health and Safety (OHS) requirements
	    ➢ workplace requirements
	• explain and demonstrate methods of accurately measuring and describing products to specification
	• use relevant communication skills
	• work effectively as an individual and with other team members
	• apply relevant regulatory requirements

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: Meat & Meat Products Processing Level III	
Unit Title	**Bone Small Stock Carcass - Leg**
Unit Code	**IND MPP3 02 0613**
Unit Descriptor	This unit covers the skills and knowledge required to remove primal cuts from the leg of a small stock carcass.

Element	Performance Criteria
1. Identify specifications for cuts	1.1. Structure of the car case and cutting lines is identified
	1.2. Specifications for cuts are determined using cut descriptions according to *regulatory requirements*, customer *specifications* and *workplace requirements*.
2. Bone leg	2.1. *Small stock* Primal cuts are sliced and removed from leg according to work instructions and specifications.
	2.2. Primal lines are cut in compliance with regulatory requirements.
	2.3. Meat safety and quality hazards are handled according to workplace procedures.
	2.4. Primals are cut to maximize yield.
	2.5. *Product* is *boned* in accordance with *Occupational Health and Safety (OHS) requirements* including the use of safe manual handling techniques and the safe and effective use of *equipment*.
3. Identify and remove defects	3.1. *Defects* are identified, removed and reported according to government regulations and workplace standards.
	3.2. Persistent defects are reported to supervisor in accordance with work instructions.

Variable	Range
Regulatory requirements	may include: • Export Control Act • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • state and territory regulations regarding meat processing.
Specifications	may: • be derived from ➢ customer requirements

	➢ workplace requirements
	• and may relate to
	  ➢ muscle groups
	  ➢ standard primals.

Workplace requirements	may include: • enterprise-specific requirements • hygiene and sanitation requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Small stock	may include: • goats • kangaroos • pigs • sheep • any other species processed for human consumption.
Product	may include: • chilled product • hot boned product.
Boning	systems or methods may include: • mechanical de-boning • quarter boning • side and table boning.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Equipment	may include: • bandsaws • hooks • knives • pouches • stands • tables.
Defects	may include: • abscesses • bruising • excreta • ingesta • pathological lesions • product contamination.
Communication skills	may include: • listening and understanding • reading and interpreting workplace documentation • speaking clearly and directly • sharing information • working with diverse individuals and groups.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Identify specifications for cuts • Bone leg • Identify and remove defects
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • dropped meat procedures • OHS requirements for boning small stock • procedure for cuts required to maximize yields for a given car case • structure of the car case and identify cutting lines • work instruction for the removal of all primals to desired specifications • workplace and customer specifications • car case defects and corrective actions to be taken • sources of contamination and cross-contamination and the ways of minimizing the contamination.
Underpinning Skills	Demonstrates skills to: • bone out the legs according to specifications and work instructions • check the accuracy of cutting lines • identify contamination and take corrective action

	• identify primals containing contamination or abnormalities and handle according to workplace and regulatory requirements • identify finished primal cuts • comply with OHS requirements • apply relevant communication skills • work effectively as an individual and as part of a team • use equipment correctly • take action to improve work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Slice and Trim Leg - Small Stock**
Unit Code	**IND MPP3 03 0613**
Unit Descriptor	This unit covers the skills and knowledge required to slice and trim relevant cuts of meat from small stock legs, including sheep, pigs, goats, game animals and other small stock processed for human consumption or pet meat.

Element	Performance Criteria
1. Identify specifications for cuts	1.1. Basic anatomy of **small stock** relevant to cutting lines is identified. 1.2. Primal or sub primal cutting lines are identified as they relate to workplace specifications and regulatory requirements. 1.3. **Specifications** for cuts are determined using cut descriptions according to **regulatory requirements**, customer specifications and **workplace requirements**.
2. Slice and trim primary meat cuts	2.1. Primary meat cuts are sliced into finished meat cuts according to specifications and work instructions. 2.2. **Occupational Health and Safety (OHS) requirements** are met including the safe and effective use of knives and safe manual handling techniques. 2.3. Dropped meat procedures are followed in accordance with workplace requirements.
3. Identify and remove defects	3.1. Defects are identified, removed and reported according to government regulations and workplace standards. 3.2. Persistent defects are reported to supervisor in accordance with work instructions.

Variable	Range
Small stock	may include: • goats • kangaroos • pigs • sheep
Specifications	may include: • cutting lines • fat depth • length and weight ranges • Muscle groups.

	• be derived from:
	  ➤ customer requirements
	  ➤ fat trim depth
	  ➤ species and workplace requirements

Regulatory requirements	may include: • Export Control Act • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • state and territory regulations regarding meat processing
Workplace requirements	may include: • enterprise-specific requirements • hygiene and sanitation requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➤ coats and aprons
	  ➤ ear plugs or muffs
	  ➤ eye and facial protection
	  ➤ head-wear
	  ➤ lifting assistance
	  ➤ mesh aprons
	  ➤ protective boot covers
	  ➤ protective hand and arm covering
	  ➤ protective head and hair covering
	  ➤ uniforms
	  ➤ waterproof clothing
	  ➤ work, safety or waterproof footwear
	  ➤ requirements set out in standards and codes of practice

Communication skills	may include: • listening and understanding • reading and interpreting workplace documentation • sharing information • speaking clearly and directly • working with diverse individuals and groups

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Identify specifications for cuts • Slice and trim primary meat cuts • Identify and remove defects
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • primal or sub primal cutting lines as they relate to workplace specifications and regulatory requirements • basic anatomy of small stock relevant to cutting lines • how yield is calculated and why it is important • regulatory requirements as they relate to car case cutting lines • relevant specifications for meat cuts sliced and trimmed from legs
Underpinning Skills	Demonstrates skills to: • apply relevant communication skills • work effectively as an individual and as part of a team • take action to improve work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Blend Meat Product**
Unit Code	**IND MPP3 04 0613**
Unit Descriptor	This unit covers the skills and knowledge required to prepare and operate blending equipment.

Element	Performance Criteria
1. Prepare blending equipment	1.1. Blending *equipment* is prepared according to *workplace*, *hygiene and sanitation*, and *Occupational Health and Safety (OHS) requirements*.
	1.2. Recognition and reporting of faults are carried out to ensure equipment is maintained to an operating level which meets manufacturer's specifications and workplace requirements.
	1.3. Equipment and tools are used according to manufacturer's specifications.
2. Make adjustments to, and operate, blending equipment	2.1. Blending equipment is adjusted when necessary according to workplace, hygiene and sanitation, and OHS requirements.
	2.2. Tools and equipment for adjusting processing equipment are used according to workplace, hygiene and sanitation, and OHS requirements.
	2.3. Blending equipment is operated in accordance with OHS, workplace and manufacturer's requirements.
	2.4. Blending equipment is used to blend a variety of products to production requirements.
3. Blend products, Clean and maintain blending equipment	3.1. A range of products is blended to workplace, OHS, hygiene and sanitation, and Quality Assurance (QA) requirements and product specifications, at a speed similar to production requirements
	3.2. Blending equipment is cleaned and maintained according to work instructions.

Variable	Range
Equipment	may be automatic or manual and include: • blenders • choppers • driers

	• fat measuring devices • machines or vats • mixers • pressure cookers • pumps, conveyors • scales • storage tanks • tables • wash-down equipment.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions
Hygiene and sanitation requirements	may include: • relevant government regulations • workplace requirements

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Mathematical skills	• accurate recording of temperature, time, volume, weight and quantity in standard formats and proformas • operations involving percentages, comparisons and variations • reading and interpreting analogue and digital measures including clocks, scales, pressure gauges, dials, thermometers

	• routine estimations and calculations using a range of specified formulas and procedures.
Communication skills	may include: • communicating with diverse individuals and groups • listening and understanding • reading and interpreting workplace-related documentation • speaking clearly and directly.
Regulatory requirements	may include: • Export Control Act • federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate knowledge and skills competence to: • safe handling procedures for operating blending equipment • explain and apply relevant regulatory requirements • take corrective action to improve own work performance • use blending equipment to blend a variety of products to production requirements • apply mathematical and communication skills relevant to the task
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • safe handling procedures for operating blending equipment • conditions under which processing equipment might need adjusting • cleaning and maintenance procedures for blending equipment if required in work instructions • relevant regulatory requirements • purpose and use of equipment used in blending
Underpinning Skills	Demonstrates skills to: • use blending equipment to blend a variety of products to production requirements • demonstrate effective operation of tools and equipment used for adjusting blending equipment • demonstrate safe handling procedures for operating blending equipment • operate equipment to manufacturer's specifications, workplace and OHS requirements

	• clean and maintain blending equipment as required in work instructions • apply mathematical and communication skills relevant to the task • learn new techniques, operate new equipment and adjust to workplace change as required • work effectively as an individual and as a team member • apply relevant regulatory requirements • take corrective action to improve own work performance
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: Meat & Meat Products Processing Level III	
Unit Title	**Cook, Steam and Cool Product**
Unit Code	**IND MPP3 05 0613**
Unit Descriptor	This unit covers the skills and knowledge required to prepare products with the application of heat treatment in a meat establishment.

Element	Performance Criteria
1. Place product in cooking or steaming facility	1.1. Individual **product** is identified and placed correctly in cooking or steaming facility for even cooking or steaming.
	1.2. Product is spaced in cooking facility according to product and manufacturer's specifications.
2. Cook or steam product	2.1. Correct **cooking** or **steaming** procedure is determined.
	2.2. Cooking or steaming cycle is set and maintained according to specifications and **workplace requirements**.
	2.3. Cooking or steaming process is regularly monitored and adjusted as necessary to fulfill product specifications.
	2.4. Internal temperature of product is checked on completion of cooking or steaming cycle to ensure correct process has been achieved.
	2.5. A variety of products are cooked or steamed to workplace requirements and customer specifications at a speed similar to production requirements.
	2.6. Process and results of cooking or steaming are correctly recorded.
	2.7. Product is dyed to achieve a uniform color when required by product specifications.
3. Chill or cool product	3.1. Product is weighed immediately on completion of cooking or steaming cycle.
	3.2. **Product is chilled immediately or cooled** at ambient temperature before chilling according to product specifications.
	3.3. Product is identified and stored according to product specifications and workplace requirements.

Variable	Range
Product	may include: • canned meat products • frankfurters • ham • ready to cut meats.
Cooking	includes: • baking • dry cooking • hot water immersion.
Steaming	may be via • a steam room • direct steam injection.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Product may be chilled or cooled	by: • chill cabinets • immersing in ambient running water • placing in cool room • placing in intensive or blast chillers • showering with ambient water • use of intensive coolers • washing in water/brine.
Hygiene and sanitation requirements	may include: • relevant government regulations • workplace requirements.
Communication skills	may: • be with people from a range of cultural, social and ethnic backgrounds • involve listening and speaking clearly • involve reading and interpreting workplace-related information • require interpreting the needs of internal or external customers.
Mathematical skills	may include: • collection • estimation • calculation and interpretation of product formulation and specifications

	• monitoring, adjusting and calibrating equipment, stock control and usage.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• PPE which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ protective boot covers
	   ➢ protective hand and arm covering
	   ➢ protective head and hair covering
	   ➢ uniforms
	   ➢ waterproof clothing
	   ➢ work, safety or waterproof footwear
	• Requirements set out in standards and codes of practice.

Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • federal, state and territory regulations regarding meat processing.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Explain correct cooking or steaming procedure for specific products • Explain procedure followed to measure product internal temperatures correctly • Explain chilling or cooling requirements for different products • Explain dye addition procedures for a given range of products • operate cooking or steaming facility in a safe and hygienic manner • demonstrate storage procedures
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • correct cooking or steaming procedure for specific products • procedure followed to measure product internal temperatures correctly

	• chilling or cooling requirements for different products
	• dye addition procedures for a given range of products
	• effect of incorrect chilling on yield
	• effects of incorrect spacing or placement of product for cooking or steaming
	• recording requirements for the cooking or steaming process
	• relevant OHS and regulatory requirements
	• cause and effects of
	   ➢ cycle out of sequence
	   ➢ drops during cooking
	   ➢ excess cooking or steaming
	   ➢ excess humidity
	   ➢ insufficient cooking or steaming and low humidity

Underpinning Skills	Demonstrates skills to:
	• cook or steam of a variety of products to product specifications, to workplace, customer, Quality Assurance (QA) and hygiene and sanitation requirements
	• identify the cause and effects of, and explain the appropriate action for:
	   ➢ cycle out of sequence
	   ➢ drops during cooking
	   ➢ excess cooking or steaming
	   ➢ excess humidity
	   ➢ insufficient cooking or steaming and low humidity
	• operate cooking or steaming facility in a safe and hygienic manner
	• demonstrate storage procedures
	• apply relevant communication and mathematical skills
	• work effectively in a range of situations as an individual and as a member of a team
	• apply relevant OHS and regulatory requirements
	• take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology

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: Meat & Meat Products Processing Level III	
Unit Title	**Operate Batch Cooker**
Unit Code	**IND MPP3 06 0613**
Unit Descriptor	This unit covers skills and knowledge required to operate a batch cooker.

Element	Performance Criteria
1. Load batch cooker	1.1. Batch cooker is loaded to correct quantity in accordance with *workplace requirements*.
	1.2. Implications are incorrectly loaded for product quality and productivity if cooker is explained.
	1.3. Effect on outcome of different types of raw materials is identified.
2. Cook raw materials and Sterilise product	2.1. Flow into cooker is monitored.
	2.2. Temperature is monitored and adjusted in accordance with workplace and *Occupational Health and Safety (OHS) requirements*.
	2.3. Outflow is monitored for workplace requirements.
	2.4. Pressure is applied (if appropriate) in accordance with workplace and *regulatory requirements*
3. Unload batch cooker	3.1. Product is tested to ensure batch is cooked to workplace requirements.
	3.2. Effects of overcooking are identified.
	3.3. Cooker is emptied in accordance with workplace requirements.
	3.4. OHS requirements for the operation and unloading of a batch cooker are identified and complied with.
4. Monitor environmental controls	4.1. Vapors are monitored to ensure they are condensed in accordance with regulatory requirements.
	4.2. Non-condensed emissions are monitored to scrubber, bio-filter and/or after burner in accordance with regulatory requirements.

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements

	• hygiene and sanitation requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements work instructions.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	  ➢ requirements set out in standards and codes of practice.

Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for the Hygienic Rendering of Animal Products • federal, state and territory regulations regarding meat processing.
Mathematical skills	may include: • calculation, estimation, collation and recording of data relating to time, temperature, humidity, quantity etc • interpretation of control screens and panels, dials and controls.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace documentation • sharing information • speaking clearly and directly.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Load batch cooker • Cook raw materials and Sterilise product • Unload batch cooker • Monitor environmental controls
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • OHS requirements of operating batch cooker • operating principles of cooker • Quality Assurance (QA) aspects of cooked product • effects of overcooking • implications on product quality and productivity of incorrect load in cooker
Underpinning Skills	Demonstrates skills to: • load and unload cooker to specifications • test product samples to ensure cooked specifications • apply mathematical skills to monitoring procedures • apply relevant communication skills • work effectively as an individual and as part of a team • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Operate Continuous Cooker**
Unit Code	**IND MPP3 07 0613**
Unit Descriptor	This unit covers the skills and knowledge required to operate a continuous cooker.

Element	Performance Criteria
1. Feed cooker, Operate and monitor cooker	1.1. Start-up process is carried out to manufacturer's and workplace requirements.
	1.2. Cooker is operated in accordance with work instructions.
	1.3. Flow into cooker is monitored.
	1.4. Level in cooker is monitored.
	1.5. Temperature is monitored and adjusted in accordance with **workplace** and **Occupational Health and Safety (OHS) requirements**.
	1.6. Outflow is monitored for workplace requirements.
	1.7. OHS requirements are identified and complied with.
2. Monitor environmental controls	2.1. Vapors are monitored to ensure they are condensed in accordance with **regulatory requirements**.
	2.2. Non-condensed emissions are monitored to scrubber, bio-filter and/or after burner in accordance with regulatory requirements.

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • hygiene and sanitation requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs

	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ mesh aprons
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for the Hygienic Rendering of Animal Products • federal, state and territory regulations regarding meat processing.
Mathematical processes	may include • calculation, estimation, collation and recording of data relating to time, temperature, humidity quantity etc • interpretation of control screens and panels, dials and controls
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Feed cooker, Operate and monitor cooker • Monitor environmental controls
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • basic operating principles of cooker • Quality Assurance (QA) requirements of operations • effects of overcooking • implications on product quality and productivity of incorrect load in cooker • production problems and out-of-specification product and take corrective action

Underpinning Skills	Demonstrates skills to: • apply mathematical processes to monitoring procedures • monitor temperature and make adjustments according to work instructions and product specifications • test product samples to ensure cooked to specifications • load and unload cooker to specifications • apply relevant communication skills • work effectively as an individual and as part of a team • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Prepare Dried Meat**
Unit Code	**IND MPP3 08 0613**
Unit Descriptor	This unit covers the skills and knowledge required to select and dry meat cuts for the production of dried meat products.

Element	Performance Criteria
1. Select and prepare meat for drying	1.1. Meats cuts are selected for drying according to workplace **product specifications**.
	1.2. Meat is inspected for defects according to regulatory requirement.
	1.3. Defects are identified and corrective action taken according to **workplace requirements**.
	1.4. Meat is prepared and stored prior to processing according to workplace requirements.
2. Dry meat products	2.1. Pre-operational checks on **product** drier are performed according to workplace requirements.
	2.2. Drier is loaded according to workplace requirements, including **hygiene and sanitation**, and **Occupational Health and Safety (OHS) requirements**.
	2.3. Drier is operated according to workplace requirements, including observing time and temperature specifications.
	2.4. Records are maintained according to workplace requirements.
	2.5. Drier is emptied according to workplace requirements.
3. Inspect and store dried meat	3.1. Dried product is inspected according to workplace requirements.
	3.2. Dried product is stored prior to packing according to workplace requirements.

Variable	Range
Product specifications	may vary according to: • customer and workplace requirements.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • Quality Assurance (QA) requirements

	• Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Product	may include: • beef (brisket and tongues) • game meat • lamb (legs and tongues) • mutton • other meat species or products • pork (hand and spring) • Veal.
Hygiene and sanitation requirements	may include: • relevant government regulations • Work place requirements.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Communication skills	may include: • interacting with people from a range of cultural, social and ethnic backgrounds • listening and understanding, speaking clearly and directly • reading and interpreting workplace communication.
Mathematical skills	may include collection, estimation, calculation and interpretation of deviations within cycle, internal temperature, humidity, ambient temperature and weights.
Regulatory requirements	may include: • Export Control Act • federal, state and territory regulations regarding meat processing

	• hygiene and sanitation requirements
	• relevant Ethiopian Standards
	• relevant regulations
	• requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Explain workplace specifications for meat to be dried • Apply time and temperature requirements for the variety of products produced • identify defects that have to be inspected for possible causes of contamination
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • ways of preventing contamination • OHS hazards associated with operating a drier • workplace specifications for meat to be dried • relevant regulatory requirements • time and temperature requirements for the variety of products produced
Underpinning Skills	Demonstrates skills to: • apply relevant communication and mathematical skills • work effectively in a range of situations as an individual and as a team member • apply workplace specifications for meat to be dried • apply relevant regulatory requirements • identify defects that have to be inspected for possible causes of contamination • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Smoke Product**
Unit Code	**IND MPP3 09 0613**
Unit Descriptor	This unit covers the skills and knowledge required to prepare products which are smoked, such as ham, bacon and small goods products.

Element	Performance Criteria
1. Select meat	1.1. Meat is selected according to ***product specifications***.
	1.2. Meat is prepared according to product specifications. Where part of the work instructions.
2. Prepare ingredients and facility	2.1. Ingredients are prepared according to product specifications and ***workplace requirements***.
	2.2. ***Machinery and equipment*** are prepared according to product and manufacturer's specifications
3. Load products	3.1. ***Product*** is checked to ensure correct spacing prior to loading.
	3.2. Product is loaded in a manner that ensures even cooking.
	3.3. Product is handled at all times according to ***Occupational Health and Safety (OHS)***, and ***hygiene and sanitation requirements***.
4. Smoke product	4.1. Core temperature probes with ***raw materials*** are inserted into the centre of the product as appropriate to product specifications and workplace requirements.
	4.2. Machinery is programmed, where applicable in accordance with manufacturer's and product specifications.
	4.3. A variety of products is smoked to workplace requirements and customer specifications at a speed similar to production requirements.
	4.4. Process is monitored and recorded according to workplace requirements.
5. Monitor smoke cycle	5.1. Smoke cycle is monitored regularly, results are noted and deviations from the program are corrected.
	5.2. Internal temperature is manually checked in accordance with workplace requirements to ensure correct smoke time has been achieved and, where necessary, further cooking is undertaken.

	5.3. When product type and processing procedures require, a shower cycle are initiated according to process specifications.
6. Chill product	6.1. On completion of smoke cycle, product is correctly weighed and either *chilled* immediately or cooled at ambient temperature to a specified internal temperature before chilling, according to regulatory requirements.
	6.2. Product is held at a specific and constant temperature according to product specifications.
	6.3. Product is stored according to product specifications.
	6.4. Product is identified and stacked according to product specifications and workplace requirements.

Variable	Range
Product specifications	may vary according to: • customer and workplace requirements.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Machinery and equipment	may include: • atomising generators • automatic or manual machinery • cookers • friction generators • liquid smoke jet • moulds • probe thermometers • sawdust or woodchip burning generators • smoke generators • smokers • sock • wet bulb reservoir.
Product	may include: • beef (e.g. brisket and tongue) • game meat • lamb (e.g. legs and tongue) • mutton • other meat species or products

	• pork (e.g. hand and spring) • veal.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Hygiene and sanitation requirements	may include: • relevant government regulations • workplace requirements.
Smoke-producing raw materials	may include: • liquid smoke • powder • sawdust, solid timber and wood chips.
Product may be chilled	by: • chill cabinets • immersing in ambient running water • placing in cool room • showering with ambient water • use of intensive coolers • Washing in water or brine.
Communication skills	may include: • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly • working with diverse groups and individuals • writing to audience needs.
Mathematical skills	may include: • collection • estimation

	• calculation and interpretation of deviations within cycle, internal temperature, humidity, ambient temperature, weights.
Descriptions and explanations	may: • be in diagrammatic, sketch, tabular or graphic formats • be presented in writing, using standard formats • be presented orally • include information and mathematical data gathered, interpreted and summarised from a range of complex and unfamiliar sources.
Regulatory requirements	may include: • Export Control Act • federal and state regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards and regulations.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate knowledge and skills competence to: • describe correct smoking procedure for specific product • apply storage procedures for smoked products • Explain chilling requirements for different products • Elaborate use and purpose of raw materials and ingredients for smoking meat • interpret cooking records where appropriate with respect to relevant product

Underpinning Knowledge and Attitudes	Demonstrates knowledge of:
	• correct smoking procedure for specific product
	• storage procedures for smoked products
	• meat smoking process
	• purpose and effect of smoking processes on meat
	• health regulations that apply to smoking of meats
	• chilling requirements for different products
	• possible effects of inconsistent temperature on product
	• effects of smoking on shelf life and taste of product
	• purpose of correct water temperature and correct additive sequence, especially phosphate and smoke
	• recording requirements for the smoking/cooking process
	• relevant workplace requirements related to:
	   ➢ appropriate humidity levels
	   ➢ effect of moisture on casings
	   ➢ smoke generator
	   ➢ smoke jet
	   ➢ sock and wet bulb sock

	• use and purpose of raw materials for smoking meat
	• use and purpose of ingredients for smoking meat
	• mathematical information in work instructions, specifications and recipes
	• meat cuts used in smoking
	• cause and effects of, and explain the appropriate corrective action for:
	   ➤ cycle out of sequence
	   ➤ excess and insufficient smokes

Underpinning Skills	Demonstrates skills to: • demonstrate correct loading procedure for both a full and less-than-full smokehouse • activate and operate machinery according to manufacturer's and workplace instructions • measure and monitor product internal temperature correctly to ensure it meets product specifications • monitor smoking of meat on a regular basis to meet product specifications (including, where relevant, the interpretation of graphs or flow charts or mimic panels and controls) • interpret cooking records where appropriate with respect to relevant product • adjust processing as required to achieve product specifications • apply relevant communication and mathematical skills • work effectively as an individual and with other team members • describe correct smoking procedure for specific product • explain chilling requirements for different products • operate smoke facility according to OHS, hygiene, regulatory, product specifications and workplace requirements, and meet production requirements • report machine faults either verbally or in writing according to workplace specifications • store meat according to OHS, hygiene, regulatory, product specifications and workplace requirements
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: Meat & Meat Products Processing Level III	
Unit Title	Fill Casings
Unit Code	**IND MPP3 10 0613**
Unit Descriptor	This unit covers the skills and knowledge required to prepare and fill casings.

Element	Performance Criteria
1. Prepare casings	1.1. Casings are calibrated according to ***product specifications*** and ***workplace requirements***.
	1.2. ***Specifications of casings*** are confirmed for each product.
	1.3. Casings are checked for ***faults*** according to workplace requirements.
	1.4. Casings are prepared as required according to workplace requirements.
	1.5. Casings are flushed thoroughly with clean water in accordance with workplace requirements.
	1.6. Casings are spooled or pulled into filling tube or nozzle in preparation for further processing.
	1.7. Correct quantity of casings is prepared in accordance with production specifications.
	1.8. Casings are prepared according to ***Occupational Health and Safety (OHS)*** and ***hygiene and sanitation requirements***.
	1.9. Casings are stored according to manufacturer's specifications and hygiene requirements.
2. Prepare filling machinery	2.1. Requirements in preparation for start-up of filling machine are completed to workplace requirements.
	2.2. Machine requirements are set correctly.
	2.3. Start-up procedures are followed to workplace requirements.
	2.4. Filling materials are attached and changed to workplace requirements and product specifications.
	2.5. OHS, hygiene and sanitation requirements are followed.
3. Fill casings and Clean equipment	3.1. Appropriate casings and filling nozzle are selected according to requirements and product specifications.

<table>
<tr><td></td><td>3.2. Filler is loaded and casings are filled to consistency required by product specifications.</td></tr>
<tr><td></td><td>3.3. Defective product is identified, removed and reported according to workplace requirements.</td></tr>
<tr><td></td><td>3.1. Equipment is cleaned according to manufacturer's specifications and workplace requirements.</td></tr>
</table>

Variable	Range
Product specifications	may include: • color • consistency and firmness • shape • size • thickness • weight.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Casing specifications	may include: • natural • synthetic.
Possible casing faults	may include: • breakage • contamination • fluctuations in diameter • incorrect label information • poor cleanliness • poor color • tearing • thick ends • weakness • webbing • whiskers • worm holes • wrong diameter.
OHS requirements	may include: • enterprise OHS policies, procedures and programs • OHS legal requirements • PPE which may include:

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	➢ coats and aprons ➢ ear plugs or muffs ➢ eye and facial protection ➢ head-wear ➢ lifting assistance ➢ mesh aprons ➢ protective boot covers ➢ protective hand and arm covering ➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear • requirements set out in standards and codes of practice.
Hygiene and sanitation requirements	may include: • relevant government regulations • workplace requirements.
Communication	may include: • communicating and working with diverse individuals and groups • listening and understanding, speaking clearly and directly • reading and interpreting workplace-related communication.
Mathematical skills	may include: • accurate recording of volume, weight and quantity in standard formats and proformas • interpreting and drawing conclusions from routine charts, bar graphs, pie charts, etc • percentages, comparisons, variations • routine estimations and calculations using a range of specified formulas and procedures.
Descriptions	may: • be in everyday workplace language including mathematical language and some commonly used technical terms • be presented in writing using standard formats, proformas, charts and diagrams • be presented orally • include mathematical and other information from several sources.
Regulatory requirements	may include: • Export Control Act • federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards and regulations.

Evidence Guide	

Critical Aspects of Competency	Competency must be demonstrated over time and under typical operating and production conditions for the enterprise to:
	• Explain procedures followed to set up filling machine to correct specifications
	• Identify storage requirements of soaked casings carried over from production
	• Apply filling yield of various sizes and types of casings
	• Explain purpose of each phase of casing preparation
	• correctly fill a range of product lines in terms of:
	  ➢ casing
	  ➢ clips
	  ➢ length
	  ➢ tension
	  ➢ weight

Underpinning Knowledge and Attitudes	Demonstrates knowledge of:
	• procedures followed to set up filling machine to correct specifications
	• appropriate corrective action for:
	  ➢ casing breakages and bent nozzles
	  ➢ jammed clips or loops
	  ➢ poorly-printed casings
	• storage requirements of soaked casings carried over from production
	• filling yield of various sizes and types of casings
	• purpose of each phase of casing preparation
	• possible faults in skins and explain their effect on the product
	• relevant regulatory requirements

Underpinning Skills	Demonstrates skills to:
	• identify casing size requirement according to product specifications
	• identify casing size requirements for specific products in regard to length, weight and diameter
	• prepare casings to product specifications and workplace procedures
	• identify possible faults in natural and synthetic casings
	• correctly fill a range of product lines in terms of:
	  ➢ casing
	  ➢ clips
	  ➢ length
	  ➢ tension
	  ➢ weight

	- perform filling to required product specifications - identify over-filled and under-filled products - identify, remove and report defective product according to workplace procedures - match clip size to casing - apply relevant communication and mathematical skills - work effectively in a range of situations as an individual and as a team member - describe storage requirements of soaked casings carried over from production - explain storage requirements of both natural and synthetic casings - apply relevant regulatory requirements - take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Operate Leg Boning Machine**
Unit Code	**IND MPP3 11 0613**
Unit Descriptor	This unit covers the skills and knowledge required to operate a leg boning machine.

Element	Performance Criteria
1. Perform preparatory cuts	1.1. Legs are selected for de-boning according to workplace specifications.
	1.2. Legs are inspected for defects and trimmed or disposed of in accordance with **workplace requirements**.
	1.3. Preparatory cuts are made prior to mechanical boning.
2. Prepare and maintain boning machinery	2.1. Routine checks and maintenance are performed according to manufacturer's requirements and work instructions.
	2.2. Faulty or out-of-specification performance of machinery is reported to appropriate personnel.
	2.3. Mechanical boner is operated according to **hygiene and sanitation requirements**
3. De-bone legs	3.1. Legs are secured safely and securely.
	3.2. Mechanical boning machinery is operated in accordance with work instructions, to minimize waste and meet workplace product quality requirements.
	3.3. **Occupational Health and Safety (OHS) requirements** are identified and followed.
	3.4. Bones are disposed of in accordance with workplace requirements.
	3.5. Workplace housekeeping requirements are completed.

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • hygiene and sanitation requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.

Hygiene and sanitation requirements	may include: • relevant government regulations • workplace requirements.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Communication skills	may include: • listening and understanding • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly • working with diverse individuals and groups.
Mathematical skills	may be used in: • applying manufacturer's instructions • calculating specifications • cleaning and sanitizing regimes and formulas • using digital or analogue controls • using material safety data sheets (MSDS)s.
Regulatory requirements	may include: • Export Control Act • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • state regulations regarding meat processing.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Perform preparatory cuts • Prepare and maintain boning machinery • De-bone legs
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • how yield is calculated and why it is important • hygiene and sanitation requirements for the operation of a mechanical boner • OHS requirements for mechanical boning, include emergency shut-down procedures • specifications for mechanically boned leg product • purpose and location of preparatory cuts on leg to be boned • relevant regulatory requirements • work instructions relating to mechanical leg boning • potential defects and explain their causes
Underpinning Skills	Demonstrates skills to: • prepare leg boning machine for operation • perform preparatory cuts according to work instructions • trim defects as required in work instructions • disassemble, clean, sanitize and maintain machine to workplace requirements • operate boning machine including routine checks and maintenance included in workplace requirements • apply relevant communication and mathematical skills • work effectively as an individual and as part of a team • apply relevant regulatory requirements • take action to improve work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Operate Complex Slicing and Packaging Machinery**
Unit Code	**IND MPP3 12 0613**
Unit Descriptor	This unit covers the skills and knowledge required to operate and control slicing and packaging machinery in small goods manufacturing operations.

Element	Performance Criteria
1. Set up equipment for operation	1.1. ***Machine set up*** of Packaging components and consumables ***materials*** and items to be packaged or sliced are confirmed and loaded to meet operating requirements.
	1.2. Cleaning and maintenance requirements, and status, are identified and confirmed.
	1.3. Machine components and related attachments are fitted and adjusted to meet operating requirements.
	1.4. ***Pre-start checks*** are carried out as required by ***workplace requirements***.
	1.5. Appropriate Personal Protective Equipment (PPE) is used as provided.
2. Operate slicing and packaging machinery	2.1. Process is started and ***slicing and packaging machinery*** are operated according to workplace procedures and ***product*** specifications.
	2.2. Equipment is 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. Appropriate remedial action is taken to correct any faults in process or product.
	2.5. Workplace housekeeping standards are met.
	2.6. Daily production schedule is met.
	2.7. Workplace records are maintained according to workplace recording requirements.
3. Ensure smooth operation of process	3.1. Potential dangers from hazards are identified and actions reflect the required precautions.
	3.2. Equipment performance is checked and adjusted as required.

	3.3. Clear and accurate oral **communication** is used with team members.
	3.4. Team members are encouraged and supported to work as an effective team.
	3.5. Safe working procedures are followed at all times.
4. Shut down the process	4.1. Appropriate shut-down procedure is identified.
	4.2. Process is shut-down according to workplace procedures.
	4.3. Faults and variances outside area of responsibility are reported promptly, clearly and accurately to an appropriate authority.

Variable	Range
Machine set up	may include: • Programming automatic machines to specifications.
Materials	may include: • ink materials for data coder • product trays • vacuum packaging film.
Pre-start checks	must include: • cleaning checks • machine guards • safety checks.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • SOPs • the ability to perform the task to production requirements • work instructions.
Slicing and packaging machinery	may include: • data coder • packaging machinery such as vacuum packaging machinery • rail system • slicing machines.
Product	may include: • bacon • boneless ham and salamis.
Communication	may: • be with people from a range of cultural, social and ethnic backgrounds

	• involve listening and understanding, speaking clearly and directly • involve reading and interpreting workplace-related communication.
Mathematical skills	may include collection, estimation, calculation and interpretation of deviations within cycle, internal temperature, humidity, ambient temperature, weights.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• PPE which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Regulatory requirements	may include: • Export Control Act • federal, state and territory regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate knowledge and skills competence to: • explain and apply Standard Operating Procedures (SOPs) • complete production documentation requirements and procedures • apply fault-finding, rectification and reporting procedures • apply relevant Occupational Health and Safety (OHS) and regulatory requirements • take action to improve own work performance
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Standard Operating Procedures (SOPs) • safe working procedures and symptoms

	• materials and equipment specifications • production documentation requirements and procedures • relevant QA and inspection procedures and systems • food safety and Hazard Analysis Critical Control Point (HACCP) requirements • precautions necessary to ensure safety • limits of authority • optimization of processing • tolerances allowable in the quality system and when action should be taken • workplace requirements for dealing with waste product • relevant OHS and regulatory requirements
Underpinning Skills	Demonstrates skills to: • demonstrate correct use of protective clothing and equipment • apply production documentation requirements and procedures • identify potential dangers in specific plant and equipment • apply fault-finding, rectification and reporting procedures • apply relevant communication and mathematical skills • work effectively as an individual • demonstrate teamwork practices and team-building techniques • observe relevant Quality Assurance (QA) and inspection procedures and systems • apply relevant Occupational Health and Safety (OHS) and regulatory requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Operate Blood Processing Plant**
Unit Code	**IND MPP3 13 0613**
Unit Descriptor	This unit covers the skills and knowledge required to operate a blood processing plant and blood meal.

Element	Performance Criteria
1. Process blood meal	1.1. Work instructions for processing blood are followed.
	1.2. Blood from slaughter floor is pumped into feeder tanks and the quality is visually monitored.
	1.3. Coagulation of blood is monitored.
	1.4. Blood is dried and temperature is monitored.
	1.5. Blood meal is monitored for quality.
	1.6. Blood meal samples are taken for analysis.
	1.7. Flow of blood for processing is regulated according to work instructions.
2. Routine maintenance	2.1. Routine maintenance is undertaken in accordance with workplace specifications.
	2.2. **Workplace**, **Occupational Health and Safety (OHS) requirements** are met for operating a blood processing plant.

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • hygiene and sanitation requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
OHS requirements	may include: • enterprise OHS policies, procedures and programs • OHS legal requirements • Personal Protective Equipment (PPE) which may include: ➢ coats and aprons ➢ ear plugs or muffs

	➢ eye and facial protection ➢ head-wear ➢ lifting assistance ➢ mesh aprons ➢ protective boot covers ➢ protective hand and arm covering ➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear ➢ requirements set out in standards and codes of practice.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace documentation • sharing information • speaking clearly and directly.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for the Hygienic Rendering of Animal Products • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • federal, state and territory regulations regarding meat processing.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Process blood meal • Routine maintenance
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • OHS and Quality Assurance (QA) requirements associated with the operation of a blood processing plant • general principles of blood processing • qualities of raw materials and final product • work instructions for the operation of a blood processing plant • relevant regulatory and workplace requirements • workplace and customer blood meal specifications

Underpinning Skills	Demonstrates skills to: • operate the blood processing plant to workplace requirements • identify production problems and out-of-specification product and take corrective action • monitor quality of blood meal • apply relevant communication skills • work effectively as an individual and as part of a team • apply relevant regulatory and workplace requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Operate Tallow Processing Plant**
Unit Code	**IND MPP3 14 0613**
Unit Descriptor	This unit covers the skills and knowledge required to produce tallow from rendered meat product.

Element	Performance Criteria
1. Press extracted tallow from cooked meal	1.1. Flow of cooked waste is monitored.
	1.2. Presses are operated and monitored in accordance with work instructions.
	1.3. ***Occupational Health and Safety (OHS) requirements*** are identified and complied with.
2. Process tallow	2.1. Start-up and shut-down procedures are carried out in accordance with ***workplace requirements***.
	2.2. Screening of solids from tallow is monitored.
	2.3. Tallow is separated.
	2.4. Tallow samples are taken.
	2.5. Tallow quality is visually monitored and feedback is provided to supervisor.
	2.6. Work instructions for tallow production are followed.
	2.7. OHS procedures are followed.
3. Ensure the quality of tallow and Contain spillage	3.1 Tallow specifications are identified.
	3.2 Processing conditions that affect tallow quality are monitored.
	3.3 Any spillage of tallow is contained in accordance with workplace requirements.

Variable	Range

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear

	> lifting assistance > mesh aprons > protective boot covers > protective hand and arm covering > protective head and hair covering > uniforms > waterproof clothing > work, safety or waterproof footwear • requirements set out in standards and codes of practice.
Workplace requirements may include:	• enterprise-specific requirements • OHS requirements • hygiene and sanitation requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly.
Regulatory requirements	may include: • Export Control Act • relevant regulations and Ethiopian Standards • requirements set out in Ethiopian Standard for the Hygienic Rendering of Animal Products.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate knowledge and skills: • On basic principles of tallow processing • On OHS requirements associated with tallow processing plant • On relevant regulatory requirements • To identify production problems and out-of-specification product and take corrective action
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • basic principles of tallow processing • OHS requirements associated with tallow processing plant • Quality Assurance (QA) requirements associated with tallow processing plant • relevant regulatory requirements

Underpinning Skills	Demonstrates skills to:
	• apply relevant communication skills
	• operate the tallow processing plant to workplace requirements
	• apply relevant regulatory requirements
	• comply with OHS requirements
	• monitor quality of tallow
	• monitor tallow processing
	• identify production problems and out-of-specification product and take corrective action
	• work effectively as an individual and as part of a team
	• take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Monitor Boiler Operations**
Unit Code	**IND MPP3 15 0613**
Unit Descriptor	This unit covers the skills and knowledge required to monitor boiler operations.

Element	Performance Criteria
1. Set up equipment	1.1. Equipment is checked prior to operation according to work instructions.
	1.2. Cleanliness of equipment is ensured according to ***workplace requirements***.
	1.3. Production problems and out-of - specification product are identified and corrective action taken
2. Operate equipment	2.1. Equipment is loaded and programmed according to work instructions.
	2.2. Equipment is operated according to manufacturer's specifications and workplace requirements.
	2.3. ***Occupational Health and Safety (OHS) requirements*** are identified and complied with.

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • hygiene and sanitation requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers

	➢ protective hand and arm covering ➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear • requirements set out in standards and codes of practice.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace documentation • sharing information • speaking clearly and directly.
Regulatory requirements	may include: • environmental protection standards, controls and protocols • Export Control Act • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for the Hygienic Rendering of Animal Products.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • operate of boiler according to workplace requirements • demonstrate operation of boiler according to workplace requirements • apply relevant regulatory requirements
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • operation of boiler according to workplace requirements • effect on product and health and safety of incorrectly operating boiler • OHS requirements in operating boiler • relevant regulatory requirements
Underpinning Skills	Demonstrates skills to: • demonstrate operation of boiler according to workplace requirements • identify production problems and out-of-specification product and take corrective action • apply relevant communication skills • work effectively as an individual and as part of a team • apply relevant regulatory requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology

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: Meat & Meat Products Processing Level III	
Unit Title	**Produce Rendered Products Hygienically**
Unit Code	**IND MPP3 16 0613**
Unit Descriptor	This unit covers the skills and knowledge required to produce rendered product hygienically.

Element	Performance Criteria
1. Control bacteria in rendered products	1.1. Micro-organisms in meat meal are identified and their impact on quality is explained.
	1.2. Risk assessment and control measures are carried out for micro-organisms.
	1.3. Good housekeeping practices are implemented to minimize risk of contamination.
	1.4. Critical control points are identified and control measures implemented.
2. Implement cleaning program for rendering plant	2.1. Cleaning program is explained and implemented for raw material processing areas as per work instructions.
	2.2. Cleaning program is explained and implemented for dry meal processing areas as per work instructions.
	2.3. ***Workplace Occupational Health and Safety (OHS) requirements*** are identified and met.

Variable	Range
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • hygiene and sanitation requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection

	➢ head-wear
	➢ lifting assistance
	➢ mesh aprons
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	➢ requirements set out in standards and codes of practice.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for the hygienic Rendering of Animal Products • requirements set out in Ethiopian Standard for hygienic Production and Transportation of Meat and Meat Products for Human Consumption • federal, state and territory regulations regarding meat processing.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Control bacteria in rendered products • Implement cleaning program for rendering plant
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • cleaning program for rendering process • relevant regulatory and workplace requirements • critical control points for monitoring hygiene and • sanitation of the process • micro-organisms affecting meat meal and the control measures for these
Underpinning Skills	Demonstrates skills to: • implement cleaning program • apply relevant regulatory and workplace requirements

	• identify production problems and out-of-specification product and take corrective action • apply relevant communication skills • assess hygiene risks and take preventative action • work effectively as an individual and as part of a team • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	**Operate Wet Rendering Process**
Unit Code	**IND MPP3 17 0613**
Unit Descriptor	This unit covers the skills and knowledge required to operate wet rendering process.

Element	Performance Criteria
1. Operate metal detector	1.1. Pre-start checks and maintenance procedures are conducted according to work instructions. 1.2. Metal detector sensitivity is checked regularly. 1.3. Metal detector is operated in accordance with ***workplace requirements***.
2. Operate and maintain size reduction equipment	2.1. Mincer is operated in accordance with workplace requirements. 2.2. Knives and plates are changed daily in accordance with workplace requirements. 2.3. ***Occupational Health and Safety (OHS) requirements*** are identified and complied with.
3. Monitor pre-heating	3.1. Start-up procedure is performed in accordance with workplace and manufacturer's requirements. 3.2. Feed rate is monitored. 3.3. In and out feed is balanced.
4. Monitor press or decanter and movement of solids to dryer	4.1. Press or decanter is monitored in accordance with workplace and manufacturer's specifications. 4.2. Temperature is monitored in accordance with workplace requirements.

Variable	Range
Workplace requirements may include:	• enterprise-specific requirements • OHS requirements • hygiene and sanitation requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
OHS requirements	may include: • enterprise OHS policies, procedures and programs

	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	➢ coats and aprons
	➢ ear plugs or muffs
	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ mesh aprons
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	➢ requirements set out in standards and codes of practice.
Communication skills	may include: • applying numeracy skills to workplace requirements • listening and understanding • reading and interpreting workplace documentation • sharing information • speaking clearly and directly.
Regulatory requirements	may include: • Export Control Act • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for the Hygienic Rendering of Animal Products • federal, state and territory regulations regarding meat processing.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Operate metal detector • Operate and maintain size reduction equipment • Monitor pre-heating • Monitor press or decanter and movement of solids to dryer
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • basic principles of wet rendering process • operation and maintenance process • need to change knives and plates daily and the replacement technique • relevant regulatory requirements

	• implications of not following manufacturer's instructions for operation and maintenance • Quality Assurance (QA) requirements for rendered product
Underpinning Skills	Demonstrates skills to: • conduct pre-start checks and maintenance procedures according to work instructions • operate machinery according to workplace instructions • produce a rendered product according to workplace requirements • identify production problems and out-of-specification product and take corrective action • apply relevant communication skills • work effectively as an individual and as part of a team • apply relevant regulatory requirements • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level III	
Unit Title	Implement Food Safety Program in Meat Processing Plant
Unit Code	IND MPP3 18 0613
Unit Descriptor	This unit covers the skills and knowledge required to maintain food safety program in a meat processing plant.

Element	Performance Criteria
1. Identify microbiological hazards for meat and meat safety	1.1. Types of micro-organisms (e.g. bacteria, virus, yeast and mould) are identified.
	1.2. Major microbiological threats to meat (i.e. bacteria and relevant yeasts or moulds) are identified and assessed to determine the risk level and control requirements.
	1.3. Types of bacteria causing food poisoning and meat spoilage are identified.
	1.4. Effects of bacterial contamination in relation to food poisoning (i.e. impact on people) and food spoilage (i.e. shelf life) are identified.
	1.5. Sources of bacterial contamination are identified.
	1.6. Growth characteristics and requirements of bacteria are identified.
	1.7. Critical Control Points (CCP) and control points for prevention and control of bacterial contamination are identified.
	1.8. Control methods required to prevent or reduce microbiological hazards are determined and implemented.
	1.9. Customer and *regulatory requirements* for microbiological contamination levels are identified.
	1.10. Relevant microbiological tests are identified and test results are assessed.
2. Identify chemical hazards for meat and meat safety	2.1. Chemical hazards which may affect meat are identified.
	2.2. Common sources of chemical hazards or contamination are identified (e.g. cleaning chemicals and drug residues) are assessed to determine the risk level and control requirements.
	2.3. Control methods which prevent or reduce chemical contamination to acceptable levels including national programs (e.g. residue testing) are determined and implemented.

	2.4. Effects of chemical residues on meat (e.g. poisoning, tainting, and rejections) are explained.
	2.5. Chemical residue testing programs and level requirements are identified.
3. Identify physical hazards on meat and meat products	3.1. Physical hazards which may affect meat are explained.
	3.2. Common sources of physical hazards and/or contamination are identified and assessed to determine the risk level and control requirements.
	3.3. Control methods to prevent contamination reaching an unacceptable level are determined and implemented.
	3.4. Effects of physical hazards on meat are explained.
4. Calibrate thermometers	4.1. Appropriate, caliber able Thermometers are identified and explained.
	4.2. Thermometers are calibrated according to regulatory requirements.
5. Identify the components of a Hazard Analysis Critical Control Point (HACCP)-based QA program for meat processing plants	5.1. Regulatory basis for compliance with a HACCP-based QA program is identified and explained.
	5.2. Steps in the development of a HACCP program are identified and explained.
	5.3. Nature and importance of work instructions or task descriptions and operating procedures are identified and workers are coached in their implications.
	5.4. Elements of a HACCP program are identified.
	5.5. Nature and importance of Good Manufacturing Practices (GMP) and pre-requisite programs are identified.
	5.6. Mechanisms for validation, monitoring and verification are identified and explained.
6. Conduct pre-operational hygiene check	6.1. Pre-operational checklists are identified.
	6.2. Corrective action procedures are identified and explained.
	6.3. Pre-operational hygiene check is conducted.
7. Conduct microbiological test swabbing	7.1. Appropriate microbiological testing regimes are identified.
	7.2. Swabbing for microbiological testing is performed according to *workplace* and regulatory requirements.
	7.3. Microbiological test results are assessed and *reported* where necessary appropriate corrective action is taken.

Variable	Range
Regulatory requirements	may include: • Export Control Act • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic • Production and Transportation of Meat and Meat Products • for Human Consumption • state and territory regulations regarding meat processing.
Workplace requirements	may include: • enterprise-specific requirements • hygiene and sanitation requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Reports	may: • be in diagrammatic, sketch, tabular, graphic formats • be presented in writing, in standard formats • be presented orally • include information and mathematical data gathered, • interpreted and summarised from a range of sources.
Communication skills	may include: • applying numeracy skills to workplace requirements • being appropriately assertive • interpreting needs of internal and/or external customers • listening and understanding • reading and interpreting workplace documentation • sharing information • speaking clearly and directly • using negotiation and persuasion skills • working with diverse individuals and groups • writing to audience needs.
Mathematical skills	may include: • calculation, estimation, collation and recording of data relating to cell counts, time, temperature, humidity, quantity, etc • interpretation of control screens and panel, dials and controls.
Problem-solving skills	may involve: • applying a range of strategies to problem-solving

	• developing practical and creative solutions to workplace problems • listening to and resolving concerns in relation to workplace issues • resolving customer concerns relative to workplace responsibilities • showing independence and initiative in identifying problems • solving problems individually or in teams • using numeracy skills .

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• PPE which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	  ➢ requirements set out in Ethiopian standards and, codes of practice.

Evidence Guide	
Critical Aspects of Competency	Must demonstrate to: • Identify microbiological hazards for meat and meat safety • Identify chemical hazards for meat and meat safety • Identify physical hazards on meat and meat products • Calibrate thermometers • Identify the components of a Hazard Analysis Critical Control Point (HACCP)-based QA program for meat processing plants • Conduct pre-operational hygiene check • Conduct microbiological test swabbing
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • aerobic and anaerobic requirements of micro-organisms • growth traits of different types of micro-organisms • bacterial contamination testing programs used in abattoirs

	• how bacterial contamination can be prevented • how bacterial growth can be controlled • how hazard risk assessment is undertaken • effect each requirement has on microbial growth • effects of incorrect removal of contamination • effects on microbial growth of refrigeration, handling techniques etc • effects on microbial growth of wet car case surfaces • impact of chemicals on meat and meat products • importance of food chain security and the implications of a break down in control • symptoms, effects and means of prevention of microbial infection contamination of meat • major sources of physical contamination • function of the elements of a HACCP-based QA system • major chemical contamination control programs • major sources of chemical contamination • monitoring and control methods employed such as inspection and metal detectors • relevant Occupational Health and Safety (OHS), regulatory and workplace requirements • elements of a HACCP-based QA program including hazard identification, control points, CCP, critical limits, control measures, preventative measures, GMP, pre-requisite programs, verification, monitoring, documentation and validation • habitat of different types of micro-organisms and their ability to survive outside the host animal • actions to prevent physical and chemical contamination of meat • conditions under which food poisoning occurs • symptoms of bacterial food poisoning • steps to limit and remove contamination.
Underpinning Skills	Demonstrates skills to: • conduct a pre-operational hygiene check • complete reports as required by regulators or the enterprise • identify and culture different types of micro-organisms • identify and describe features of major types of micro-organisms affecting the meat industry • identify and interpret relevant regulations and Ethiopian Standards • identify and utilize sources of information • apply relevant communication and mathematical skills

	- calibrate a thermometer - work effectively as an individual and as part of a team - take action to improve own work performance as a result of self-evaluation, feedback from others and in response to changed work practices or technology - use relevant problem-solving 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: Meat & Meat Products Processing Level III	
Unit Title	Monitor Implementation of Work Plan/Activities
Unit Code	IND MPP3 19 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 is 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	Demonstrates skills and knowledge in: • 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 to: • monitor and improve workplace operations • plan and organize workflow • maintain workplace records
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • 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: Meat & Meat Products Processing Level III	
Unit Title	**Apply Quality Control**
Unit Code	**IND MPP3 20 0613**
Unit Descriptor	This unit covers the knowledge, attitudes and skills required in applying quality control in the workplace.

Elements	Performance Criteria
1. Implement quality standards	1.1 Agreed quality standard and procedures are acquired and confirmed.
	1.2 Standard procedures are introduced to organizational staff/personnel.
	1.3 Quality standard and procedures documents are provided to employees in accordance with the organization policy.
	1.4 Standard procedures are revised / updated when necessary.
2. Assess quality of service delivered	2.1 Services delivered are **quality checked** against organization **quality standards** and specifications.
	2.2 Service delivered are evaluated using the appropriate evaluation **quality parameters** and in accordance with organization standards.
	2.3 Causes of any identified faults are identified and corrective actions 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	May include but not limited to: • Check against design / specifications • Visual inspection and Physical inspection
Quality standards	May include but not limited to: • Materials • Components • Process and Procedures
Quality parameters	May include but not limited to: • Standard Design / Specifications • Material Specification

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge 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
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • 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: Meat & Meat Products Processing Level III	
Unit Title	**Lead Workplace Communication**
Unit Code	**IND MPP3 21 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	May include but not limited to: • Non-verbal gestures • Verbal • Face to face • Two-way radio • Speaking to groups • Using telephone • Written • Using Internet and 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: Meat & Meat Products Processing Level III	
Unit Title	**Lead Small Teams**
Unit Code	**IND MPP3 22 0613**
Unit Descriptor	This unit covers the skills, knowledge and attitudes required to determine individual and team development needs and facilitate the development of the work group.

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

	3.4 Records and reports of Competence are maintained within organizational requirement.
4. Develop team commitment and cooperation	4.1 Open communication processes to obtain and share information is used by team.
	4.2 Decisions are reached by the team in accordance with its agreed roles and responsibilities.
	4.3 Mutual concern and camaraderie are developed in the team.
5. Facilitate accomplishment of organizational goals	5.1 Team members actively participated in team activities and communication processes.
	5.2 Teams' members developed individual and joint responsibility for their actions.
	5.3 Collaborative efforts are sustained to attain organizational goals.

Variable	Range
Learning and development needs may include but not limited to:	• Coaching, mentoring and/or supervision • Formal/informal learning program • Internal/external training provision • Work experience/exchange/opportunities • Personal study • Career planning/development • Performance appraisals • Workplace skills assessment & Recognition of prior learning
Organizational requirements may include but not limited to:	• Quality assurance and/or procedures manuals • Goals, objectives, plans, systems and processes • Legal and organizational policy/guidelines and requirements • Safety policies, procedures and programs • Confidentiality and security requirements • Business and performance plans • Ethical standards • Quality and continuous improvement processes and standards
Feedback on performance may include but not limited to:	• Formal/informal performance appraisals • Obtaining feedback from supervisors and colleagues • Obtaining feedback from clients • Personal and reflective behavior strategies • Routine and organizational methods for monitoring service delivery
Learning delivery methods may include:	• On the job coaching or mentoring • Problem solving • Presentation/demonstration

	• Formal course participation
	• Work experience and Involvement in professional networks
	• Conference/seminar attendance and induction

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: • identify and implement learning opportunities for others • give and receive feedback constructively • facilitate participation of individuals in the work of the team • negotiate learning plans to improve the effectiveness of learning • prepare learning plans to match skill needs • access and designate learning opportunities
Underpinning Knowledge and Attitude	• coaching and mentoring principles • how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective • how to facilitate team development and improvement • methods and techniques for eliciting and interpreting feedback • methods for identifying and prioritizing personal development opportunities and options • career paths and competence standards in the industry
Underpinning Skills	• read and understand a variety of texts, prepare general information and documents according to target audience; spell with accuracy; use grammar and punctuation effective relationships and conflict management • receive feedback and report, maintain effective relationships and conflict management • organize required resources and equipment to meet learning needs • provide support to colleagues • organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes • facilitation skills to conduct small group training sessions • relate to people from a range of social, cultural, physical and mental backgrounds
Resources Implication	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 exam • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the workplace or in a simulated workplace setting

Occupational Standard: Meat & Meat Products Processing Level III	
Unit Title	**Improve Business Practice**
Unit Code	**IND MPP3 23 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 includes:	• organization capability • appropriate business structure • level of client service which can be provided • internal policies, procedures and practices • staff levels, capabilities and structure • market, market definition • market changes/market segmentation • market consolidation/fragmentation • revenue • level of commercial activity • expected revenue levels, short and long term • revenue growth rate • break even data • pricing policy • revenue assumptions • business environment • economic conditions • social factors • demographic factors • technological impacts • political/legislative/regulative impacts • competitors, competitor pricing and response to pricing • competitor marketing/branding 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'	• S: Specific • M: Measurable • A: Achievable • R: Realistic and T: Time defined

Market research data	May include but not limited to:
	• data about existing clients
	• data about 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	May include competitor offerings, promotion strategies, activities and profile in the market place
Market position should include data on:	• 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 - AIDA (Attention, Interest, Desire and Action)
Benefits	- features and benefits as perceived by the client
Promotion tools	- 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 and reduce discounts and sell more services to existing clients

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge in: • ability to identify the key indicators of business performance • ability to identify the key market data for the business • knowledge of a wide range of available information sources • ability to acquire information not readily available within a business • ability to analyze data and determine areas of improvement • ability to negotiate required improvements to ensure implementation • ability to evaluate systems against practice requirements and form recommendations and/or make recommendations • ability to assess the accuracy and relevance of information
Underpinning Knowledge and Attitudes	• 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: Meat & Meat Products Processing Level III	
Unit Title	**Prevent and Eliminate MUDA**
Unit Code	**IND MPP3 24 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 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.

NTQF Level IV

Occupational Standard: Meat & Meat Products Processing Level IV	
Unit Title	**Apply Meat Science**
Unit Code	**IND MPP4 01 0613**
Unit Descriptor	This unit covers the skills and knowledge required to apply meat science to the eating quality of meat and to interpret scientific data to predict probable impacts on meat eating quality.

Elements	Performance Criteria
1. Apply knowledge of muscle structure and biochemistry to meat quality and the factors that affect it	1.1. Biological mechanisms (both pre and post slaughter) that affect meat quality in beef are explained. 1.2. Pattern of tissue development in the body and the pattern of deposition within the muscle and fat depots within the body are identified including the composition of fat in depots and the extent it can be manipulated by production factors. 1.3. Structure of skeletal muscles in terms of the myofibril and connective tissue components and the effect that these structures have on eating quality is identified. 1.4. Biochemical events that occur in muscle early post-mortem and their significance in subsequent meat quality are identified.
2. Identify *the* production and pre-slaughter factors that affect meat quality	2.1. Impacts of **production and pre-slaughter factors** on meat quality are identified. 2.2. Pre-slaughter factors are explained.
3. Identify them. processing factors that impact on eating quality	3.1. **Processing factors that affect eating quality** like pH/temperature window and how it impacts on palatability is explained. 3.2. Role of electrical stimulation in controlling the rate of glycol sis in the carcass is described. 3.3. Impact of stretching the muscles pre-rigor on palatability is explained. 3.4. Process of ageing, its impact on tenderness and methods for extending the storage life of fresh meat including the application of packaging technologies is described. 3.5. Impact of cooking on the palatability of meat is described.

4. Describe quality attributes of meat	4.1. Factors that control the changes in color in fresh meat are identified.
	4.2. Development of marbling fat and its impact on palatability in the carcass is described.
	4.3. Impact of drip on both the appearance and palatability of meat is explained.
5. Identify and evaluate the MSA cuts based grading scheme	5.1. Palatability Analysis Critical Control Points (PACCP) approach to meat grading is explained.
	5.2. Principles behind the development of the MSA carcass pathways system, including tasting protocols, are described.
	5.3. Impact of the various production, processing and value-adding inputs on the palatability of beef using the MSA model are established.
	5.4. Potential benefits of a cuts-based grading system to the various sectors of the industry are evaluated.
	5.5. Alternative grading schemes and their various grade attributes are analyzed.
6. Interpret and analyse data to predict probable impacts on meat eating quality	6.1. Probable impacts of production and processing on meat quality are predicted.
	6.2. Potential solutions are identified for eating quality problems.

Variable	Range
Production and pre-slaughter factors that affect meat quality	may include: • breed • growth path • glycogen depletion • high pH • Hormonal Growth Promotants (HGPs) • stress and stress reduction techniques.
Processing factors that affect meat eating quality	may include: • ageing • anatomical factors • biochemical factors • cooking methods • electrical stimulation • fat distribution • grain feeding • growth rate or path

	- hanging method - hormonal growth promotants - marbling - packaging methods - Pale Soft Exudative (PSE) - pH - post mortem shortening - social regrouping of cattle - starvation - stress - temperature - time and temperature of cooking process - transport - tropical breed content.
Communication skills	may include: - applying numeracy skills to workplace requirements - being appropriately assertive - interpreting the needs of internal or external customers - listening and understanding - reading and interpreting workplace-related documentation - sharing information - speaking clearly and directly - working with diverse individuals and groups - writing to audience needs.
Data	includes: - ageing requirements - chiller assessment results, transport times - chiller cycles - lairage duration and conditions - MSA grading results - processing conditions, such as stimulation and other electrical inputs - time across the slaughter floor.

OHS requirements	may include:
	- enterprise OHS policies, procedures and programs
	- OHS legal requirements
	- Personal Protective Equipment (PPE) which may include:
	    ➢ coat and apron
	    ➢ ear plugs or muffs
	    ➢ eye and facial protection
	    ➢ head-wear
	    ➢ lifting assistance
	    ➢ mesh apron
	    ➢ protective boot covers

	➢ protective hand and arm covering ➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear ➢ requirements set out in standards and codes of practice.
Regulatory requirements	may include: • Export Control Act • relevant Ethiopian Standards • relevant regulations • Ethiopian Standard for the Hygienic Production and • Transportation of Meat and Meat Products for Human Consumption • state and territory regulations regarding meat processing.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Minimum standards of performance	include: • ability to identify areas where changes in management could potentially improve eating quality • analysis of data to present management with possible solutions.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Apply knowledge of muscle structure and biochemistry to meat quality and the factors that affect it • Identify the production and pre-slaughter factors that affect meat quality • Identify them. processing factors that impact on eating quality • Describe quality attributes of meat • Identify and evaluate the MSA cuts based grading scheme • Interpret and analyze data to predict probable impacts on meat eating quality
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • consumer taste testing protocols and how they have been used to set grade standards and develop the cuts-based grading system

	• factors that control the changes in colour in fresh meat and other quality factors including drip and marbling which impact on both appearance and palatability
	• factors that occur between the knocking box and chiller assessment and their impact on meat palatability
	• visual and palatability attributes of meat quality that are important to customers
	• physical and chemical changes that occur in the cooking of meat
	• anatomical and biochemical determinants of meat palatability
	• factors in animal husbandry, transport, lairage, slaughter, car case storage, packaging, further processing and cooking that will impact on tenderness and palatability
	• minimum standards of performance
Underpinning Skills	Must demonstrate skills to: • apply relevant communication skills • collate and analyse eating quality data • maintain currency of knowledge through independent research or professional development • identify and apply relevant OHS, regulatory and workplace requirements • identify and recommend improvements that could be made to improve meat eating quality to management • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level IV	
Unit Title	**Develop and Implement Work Instructions and SOPs**
Unit Code	**IND MPP4 02 0613**
Unit Descriptor	This Unit covers the skills and knowledge required to develop and implement work instructions and Standard Operating Procedures (SOPs). It addresses the planning and consultation process for development, validation and implementation.

Elements	Performance Criteria
1. Identify and scope the requirements of the work instructions and SOPs	1.1 Format is developed or selected according to enterprise requirements.
	1.2 Individual tasks/responsibilities to be covered are accurately identified.
	1.3 The sequence of tasks is determined to ensure efficiency is achieved.
	1.4 The sequencing of information is made consistent with current or desired performance.
	1.5 ***Regulatory and customer requirements*** are identified.
2. Write work instruction or SOP	2.1 Work instruction or SOP identifies key roles and responsibilities.
	2.2 Document is prepared using a ***format and language*** consistent with enterprise procedures.
	2.3 ***Corrective actions and/or critical control points*** are included in the documentation.
	2.4 ***Safe work practices*** and/or hygiene requirements related to the task are included.
	2.5 Photographs or illustrations are included as appropriate.
	2.6 Document version control procedures are implemented.
3. Validate work instruction or SOP	3.1 Written document is tested for consistency with identified requirements and supports workplace performance.
	3.2 Written document is trialled with personnel to confirm clarity and language is appropriate to literacy needs.
	3.3 Written document addresses WHS, hygiene and regulatory requirements as appropriate.
	3.4 Written document is amended, as necessary, based on feedback from validation activities.
	3.5 Images and diagrams are examined for accuracy and ***conformance to workplace and regulatory requirements***.

4. Implement work instruction or SOP	4.1 **Required approvals** are obtained and recorded.
	4.2 Plan for implementation is developed and communicated to appropriate personnel.
	4.3 Training requirements are identified and addressed.
	4.4 Work instruction or SOP is implemented.
	4.5 Effectiveness of implementation is evaluated.
	4.6 Records of implementation are stored appropriately.

Variable	Range
Regulatory and customer requirements	may include: • Ethiopian standard for the hygienic production and transportation of meat and meat products • other relevant Ethiopian Standards • Export Control Act • DAFF Biosecurity notices • Approved Arrangement • Ecologically Sustainable Development (ESD) principles, environmental hazard identification, risk assessment and control • food safety, HACCP, hygiene and temperature control • inspection arrangements for DAFF Biosecurity and the • Ethiopian Customs Service (ACS) • business or workplace operations, policies and practices • WHS hazard identification, risk assessment and control.
Format and language	may include: • cultural diversity and/or special language needs of the workplace • photographic illustrations to identify particular characteristics • pictograms to demonstrate particular activities • using Plain English.
Corrective actions and/or critical control points	may relate to: • food safety standards • HACCP • product specifications.

Safe work practices	may include:
	• enterprise WHS policies, procedures and programs
	• WHS legal requirements
	• hazard assessments
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs

	➢ eye and facial protection ➢ head-wear ➢ lifting assistance ➢ mesh aprons ➢ protective boot covers ➢ protective hand and arm covering ➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear ➢ requirements set out in standards and codes of practice.
Conformance to workplace and regulatory requirements of images and diagrams	may include: • copyright permissions acknowledgement • ensuring depiction conforms to workplace requirements.
Required approvals	may include: • approval for inclusion in the Approved Arrangement • enterprise corporate approvals.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge in: • perform tasks necessary to develop and validate work instructions or SOP • implement the work instructions or SOPs • assess implementation against the product specification, WHS requirements, and as meeting the learning needs of intended staff. • enterprise Standard Operating Procedures (SOPs) • HACCP planning • product specifications, quality objectives and production • parameters • sources of information relating to equipment and personnel capability • special language requirements of the workplace • the manageable tasks capable of completion within the time available and to the requirements of the product specification • the processes for validating documents • workplace WHS requirements • version control • workplace chain of communication • implementation processes • record keeping requirements.

Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • communication techniques appropriate for culturally diverse workforce • Hazard Analysis Critical Control Point (HACCP) and food safety plan • legal and regulatory requirements impacting the Ethiopian meat processing industry • WHS requirements • methods available to regulate production flows, temperature control and time • product and process specifications • organizational communication systems • production systems, including corrective actions and control points validation techniques

Underpinning Skills	• collect, record and analyze data
	• communicate with work teams and management
	• communicate complex technical information to culturally diverse staff
	• interpret product specifications, standards and production information
	• use enterprise procedures to control document versions
	• use computers to develop, control and store documentation
	• develop plans
	• prioritize tasks
	• solve problems
	• apply literacy skills to compile reports and use Plain English
	• interpret complex technical specifications or data
	• prepare detailed specifications, procedures and work instructions
	• read and interpret information
	• record and analyze data
	• report progress and technical information.
	• use numeracy skills to:
	  ➢ calculate time and other production data
	  ➢ estimate volume, mass and weight
	  ➢ gather and record data and prepare technical reports.

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: Meat & Meat Products Processing Level IV	
Unit Title	**Participate in OHS Risk Control Process**
Unit Code	**IND MPP4 03 0613**
Unit Descriptor	This unit covers the skills and knowledge required to participate in the reduction of OHS risks in a meat processing plant.

Elements	Performance Criteria
1. Participate in workplace inspections	1.1. Group processes are facilitated to identify potential OHS hazards.
	1.2. Workplace inspections are participated in to identify potential hazards as appropriate.
	1.3. Reporting obligations are fulfilled.
	1.4. Risk control processes are implemented.
2. Participate in OHS risk control process	2.1. Risk assessment processes are participated in.
	2.2. ***Hazards are controlled*** in accordance with hierarchy of controls.
	2.3. Workplace procedures are initiated for dealing with hazardous events.
	2.4. Information is provided to relevant parties in line with action or is reported to designated personnel.
3. Monitor implementation of safe work practices	3.1. Compliance with safe work practices is demonstrated by example.
	3.2. Safe work performance is monitored by employees.
	3.3. Safe work practices are implemented in accordance with ***regulatory requirements***.
4. Assist development of safe work practices	4.1. Changes are developed to work procedures or Standard Operating Procedures (SOPs) in line with outcomes of risk control processes and regulatory requirements.
	4.2. Employees are consulted in relation to the development of safe work practices.
	4.3. Employee understanding of safe work procedures on-the-job is reinforced.
5. Contribute to participative arrangements for the management of OHS	5.1. Organizational procedures for consultation over OHS issues are implemented and monitored to ensure that all members of the work group have the opportunity to contribute.

	5.2. Issues raised are dealt through consultation with and resolved promptly or referred to the appropriate personnel for resolution in accordance with **workplace requirements** or procedures.
	5.3. Outcomes of consultation over OHS issues are made known to the work group promptly.
6. Contribute to workplace rehabilitation program as appropriate	6.1. Contributions are made to workplace rehabilitation programs in accordance with rehabilitation coordinator and/or rehabilitation providers requirements.
	6.2. Contributions are made to workplace rehabilitation programs in accordance with regulatory and **OHS requirements**

Variable	Range
Hazard control equipment	may include: • dust extractors • machine guards • mechanical aids • acoustic insulation • PPE
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for human Consumption • state and territory regulations regarding meat processing
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance requirements • SOPs • the ability to perform the task to production requirements • work instructions
OHS requirements	may include: • enterprise OHS policies, procedures and programs • OHS legal requirements • Personal Protective Equipment (PPE) which may include: ➢ coats and aprons ➢ ear plugs or muffs ➢ eye and facial protection

	➢ head-wear ➢ lifting assistance ➢ mesh aprons ➢ protective boot covers ➢ protective hand and arm covering ➢ protective head and hair covering ➢ uniforms ➢ waterproof clothing ➢ work, safety or waterproof footwear ➢ requirements set out in standards and codes of practice
Communication skills	may include: • applying numeracy skills to workplace requirements • being appropriately assertive • empathizing • establishing/using networks • interpreting the needs of internal/external customers • listening and understanding • negotiating responsively • persuading effectively • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly • working with diverse individuals and groups • writing to audience needs

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Participate in workplace inspections • Participate in OHS risk control process • Monitor implementation of safe work practices • Assist development of safe work practices • Contribute to participative arrangements for the management of OHS • Contribute to workplace rehabilitation program as appropriate
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • procedures for reporting hazards, accidents and incidents • risk management principles • process for developing and altering work procedures or SOPs
Underpinning Skills	Must demonstrate skills to: • demonstrate participative problem-solving techniques to identify and resolve OHS issues • identify and apply extent of responsibility

	• identify and apply relevant OHS and workplace requirements • demonstrate safe work practices associated with work tasks • identify OHS hazards in the workplace • identify relevant hazard control equipment and explain function, safe operation, maintenance and storage requirements • use facilitation skills to ensure participation from all group • members • use relevant communication 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: Meat & Meat Products Processing Level IV	
Unit Title	**Facilitate Hygiene and Sanitation Performance**
Unit Code	**IND MPP4 04 0613**
Unit Descriptor	This unit covers the skills and knowledge required to monitor the hygiene and sanitation performance of a meat processing plant.

Elements	Performance Criteria
1. Interpret statutory and workplace requirements relating to hygiene and sanitation	1.1. ***Hygiene and sanitation***, ***regulatory*** and ***workplace requirements*** are explained to other workers to assist their workplace performance. 1.2. Employer and employee rights, responsibilities and obligations are implemented in achieving hygiene and sanitation compliance.
2. Monitor hygiene and sanitation performance	2.1. Hygiene and sanitation are monitored to workplace and statutory requirements to verify compliance. 2.2. Situations requiring action to improve hygiene and sanitation compliance are reported as part of the continuous improvement process. 2.3. Results of process and product monitoring are evaluated for their impact on hygiene and sanitation.
3. Respond to hygiene and sanitation problems	3.1. Hygiene and sanitation issues are investigated according to established processes and procedures to achieve resolution of the problem under examination. 3.2. Recommended action arising from the investigation is followed up and ***reported*** to ensure reinforcement and ***documentation*** of the outcomes.
4. Evaluate results of microbiological testing	4.1. Results of microbiological testing are analyzed in terms of regulatory and workplace requirements. 4.2. Corrective action is taken in response to microbiological results when required by workplace and regulatory requirements.

Variable	Range
Hygiene and sanitation requirements may include:	• relevant government regulations • workplace requirements. • Statutory requirements may include relevant hygiene and sanitation, environmental and food safety legislation, and workplace policy, practices and procedures.

	• Documentation may typically include status reports and technical manuals.
Regulatory requirements	may include: • Export Control Act • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • state and territory regulations regarding meat processing.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Reporting	will be: • according to statutory and workplace requirements and may be in manual and/or electronic systems.
Documentation	may include: • status reports • technical manuals.

OHS requirements	may include:
	 • enterprise OHS policies, procedures and programs
	 • OHS legal requirements
	 • Personal Protective Equipment (PPE) which may include:
	     ➢ coats and aprons
	     ➢ ear plugs or muffs
	     ➢ eye and facial protection
	     ➢ head-wear
	     ➢ lifting assistance
	     ➢ mesh aprons
	     ➢ protective boot covers
	     ➢ protective hand and arm covering
	     ➢ protective head and hair covering
	     ➢ uniforms
	     ➢ waterproof clothing
	     ➢ work, safety or waterproof footwear
	     ➢ requirements set out in standards and codes of practice.

Communication skills	may include: • applying numeracy skills to workplace requirements • being appropriately assertive

	• empathising
	• establishing/using networks
	• interpreting the needs of internal/external customers
	• listening and understanding
	• negotiating responsively
	• persuading effectively
	• reading and interpreting workplace-related documentation
	• sharing information
	• speaking clearly and directly
	• working with diverse individuals and groups
	• writing to audience needs.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Interpret statutory and workplace requirements relating to hygiene and sanitation • Monitor hygiene and sanitation performance • Respond to hygiene and sanitation problems • Evaluate results of microbiological testing
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • purpose of hygiene and sanitation monitoring • regulatory and commercial implications of inadequate control of hygiene and sanitation • company processes and procedures to conduct a hygiene and sanitation investigation • employer and employee rights, responsibilities and obligations regarding hygiene and sanitation • statutory requirements related to the site at which the person is employed
Underpinning Skills	Must demonstrate skills to: • define the problem to be investigated • demonstrate understanding and application of HACCP systems • identify and apply Occupational Health & Safety (OHS) requirements • plan approach to the investigation • evaluate the problem • explain and monitor workplace hygiene and sanitation policies, practices and procedures • report outcomes of the investigation • follow up post-investigation issues • identify action required to strengthen hygiene and sanitation compliance

	• implement the monitoring procedures
	• report monitoring outcomes
	• use techniques for individual and team resolution of the problem
	• use relevant communication 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: Meat & Meat Products Processing Level IV	
Unit Title	**Monitor and Overview the Production of Uncooked Comminuted Fermented Meat (UCFM)**
Unit Code	**IND MPP4 05 0613**
Unit Descriptor	This unit covers the skills and knowledge required to understand and manage the production processes of Uncooked Comminuted Fermented Meat (UCFM).

Elements	Performance Criteria
1. Identify microbiological hazards for UCFM products	1.1. Types of ***micro-organisms*** are identified.
	1.2. ***Major threats*** to ***UCFM products*** are identified.
	1.3. Types of bacteria causing food poisoning and spoilage are identified.
	1.4. Effects of bacterial contamination for food poisoning (i.e. impact on people) and food spoilage (i.e. shelf life) are identified.
	1.5. Sources of bacterial contamination are identified.
	1.6. Growth characteristics and requirements of bacteria are identified.
2. Identify chemical hazards for UCFM products	2.1. Chemical hazards which may affect UCFM products are identified.
	2.2. ***Common sources of chemical hazards/contamination*** are identified.
	2.3. Control methods which prevent chemical contamination locally and relevant national programs (e.g. residue testing) are explained.
	2.4. Impact of chemical residues on meat (e.g. poisoning, tainting, rejections) is explained.
3. Identify physical hazards for UCFM products	3.1. Physical hazards which may affect meat are explained.
	3.2. Common sources of physical hazards and/or contamination are identified.
	3.3. Control methods to prevent contamination are explained.
	3.4. Effects or impact of physical hazards on meat are explained.
4. Overview the production of UCFM products	4.1. Range of UCFM products is identified and explained.
	4.2. Processing techniques involved in production of UCFM are identified and explained.
	4.3. Hygiene and food safety hazards associated with the production of UCFM products are identified and explained.

		4.4. **Regulatory requirements** associated with the production of UCFM products are identified and explained.
5. Monitor the preparation of processing *equipment* and areas		5.1. Procedures for pre-operational **equipment** checks are identified in accordance with workplace policies and procedures, and manufacturer's instructions.
		5.2. Pre-operational checks and procedures carried out in accordance with workplace, food safety and regulatory requirements are monitored.
6. Manage the production of UCFM and further processed products		6.1. **Ingredients** are identified by type, quality and safety according to product specifications and their function in the process is explained (including starter culture).
		6.2. Types of meat, by-product, stock, additive, binder and spices selected are identified according to the formulation specifications and regulatory requirements.
		6.3. Handling requirements for ingredients (including starter culture) to prevent food safety hazards are demonstrated to ensure product quality and safety.
		6.4. Relevant processing equipment is identified and operating procedures are explained according to manufacturer and workplace specifications.
		6.5. Relevant time, temperature and humidity requirements for fermentation, maturation and monitoring are described in accordance with product specifications, regulatory requirements and industry guidelines.
		6.6. Relevant consistency, appearance, texture and monitoring requirements are described in accordance with product specifications and regulatory requirements.
		6.7. Procedures for rejection, reprocessing and/or recall for products which do not meet specifications or hygiene and sanitation requirements are identified and assessed against regulatory requirements and industry guidelines.
		6.8. Relevant processing area hygiene and sanitation requirements are identified and monitored as specified in workplace procedures and regulatory requirements.
7. Overview the implementation of the Approved Hazard Analysis Critical Control Point (HACCP) plan for the		7.1. Critical Control Points (CCPs) and control points for prevention and control of bacterial contamination (e.g. process controls and systems) are identified.
		7.2. Control methods to prevent microbiological contamination are explained and implemented.
		7.3. Critical limits for CCPs are identified and monitoring processes are implemented.

production of UCFM products	7.4. Validation requirements for critical limits of HACCP programs are described.
	7.5. Documented procedures are implemented which ensure any CCPs which are out of control are brought back into control and affected product is suitably handled.
	7.6. Documented procedures are implemented to ensure the whole HACCP system is regularly audited and verified as working effectively.
	7.7. All documents and *records* required for the system are kept available, up-to-date and in use.

Variable	Range
Micro-organisms	may include: • Bacteria • mould • virus • yeast.
Major threats	may include: • bacteria • relevant yeast or moulds.
UCFM products	may include • caccitora • chorizo • csabai • landjaeger • Lebanon Bologne • mettwurst • polnische • salami • some cabanossi • summer sausage • Teewurst, and others.
Common sources of chemical hazards/contamination	may include: • agricultural residue • cleaning • veterinarian chemical residues.
Regulatory requirements	may include: • Export Control Act • Export Meat Orders (EMOs) • hygiene and sanitation requirements • importing country requirements where appropriate • relevant domestic requirements • relevant regulations and Ethiopian Standards

	• Ethiopian Standard for the hygienic production and
	• transportation of meat and meat products for human consumption
	• federal, state and territory regulations regarding meat processing.
Equipment	may include:
	• blenders
	• choppers
	• cooking utensils
	• dryers
	• fermentation environment
	• injectors
	• knives
	• machine or vat
	• mixers
	• pressure cookers
	• sausage machine
	• silent or bowl cutter
	• smokehouse
	• tables, conveyors, platforms
	• tumblers.
Ingredients	may include:
	• additives
	• binders
	• by-products and other relevant materials
	• fats
	• meats
	• Nitrate
	• Nitrite
	• spices
	• starter cultures
	• water.
Recording and monitoring systems	may be:
	• electronic
	• manual.
Communication skills	may include:
	• communicating with people from a range of cultural, social and ethnic backgrounds
	• preparing oral or written reports which include information from a range of sources
	• reading and interpreting workplace documentation, such as audit reports, monitoring data, specifications and status reports
	• speaking clearly and directly

	• listening and understanding
	• preparing documentation for a specified audience
	• using negotiation and persuasion skills, and being appropriately assertive
	• using technical workplace and mathematical language and data
	• sharing of information.
Mathematical skills	may include:
	• identifying acceptable limits, tolerances, out-of-specification performance, trends
	• collection, estimation, calculation and interpretation of deviations within cycle, internal temperature, humidity, ambient temperature, weights
	• measurement and interpretation in relation to time, temperature, moisture humidity, ratios, percentages, weight, mass, volume.
OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	➢ coats and aprons
	➢ ear plugs or muffs
	➢ eye and facial protection
	➢ head-wear
	➢ lifting assistance
	➢ mesh aprons
	➢ protective boot covers
	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	➢ requirements set out in standards and codes of practice.
Workplace requirements	may include:
	• enterprise-specific requirements
	• OHS requirements
	• Quality Assurance (QA) requirements
	• Standard Operating Procedures (SOPs)
	• the ability to perform the task to production requirements
	• work instructions.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to:
	• Identify microbiological hazards for UCFM products
	• Identify chemical hazards for UCFM products

	• Identify physical hazards for UCFM products • Overview the production of UCFM products • Monitor the preparation of processing equipment and areas • Manage the production of UCFM and further processed products • Overview the implementation of the Approved Hazard Analysis Critical Control Point (HACCP) plan for the production of UCFM products
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • process involved in manufacturing UCFM • purpose of fermentation • raw materials storage and selection • fermentation control criteria for pH • fermentation speed control • purpose of maturation and drying • maturation and drying speed control • impact of the raw material on product quality and food safety • water activity as a release criteria • microbiological criteria in UCFM production and microbiological limits of UCFM, particularly the following significant microbial pathogens: enterohaemorrhagic Escherichia coli, Salmonella, enterotoxin of Staphylococcus aureus and Listeria monocytogenes • physical hazards for UCFM products • role of starter culture • storage and handling requirements for starter culture • product handling and release criteria • impact of critical limits in a HACCP program for UCFM production • procedures required to ensure the product is fit for human • consumption and meets regulatory, food safety and quality requirements • implementation of the HACCP plan for the production of UCFM products
Underpinning Skills	Must demonstrate skills to: • apply relevant communication and mathematical skills • maintain currency of knowledge and techniques through informal learning, regular professional development and personal research such as by using the web, industry journals, circulars from regulators and industry workshops • work effectively as an individual and as a team member • demonstrate initiative and creativity in proposing solutions and contributing to the development of appropriate actions to resolve problems

	• identify and apply relevant Occupational Health and Safety (OHS) and workplace requirements • monitor production of UCFM to ensure compliance with workplace and regulatory requirements • provide relevant information to work colleagues to facilitate understanding of, and compliance with the Ethiopian Standards and associated regulations • take action to improve own work practice as a result of self-evaluation, feedback from others, or changed work practices, regulations or technology • use technology to access information, prepare reports, and to access and prepare relevant data
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: Meat & Meat Products Processing Level IV	
Unit Title	**Monitor and Overview the Production of Processed Meats and Small Goods**
Unit Code	**IND MPP4 06 0613**
Unit Descriptor	This unit covers the skills and knowledge required to understand and monitor the production processes of meats small goods

Elements	Performance Criteria
1. Overview the production of further processed meats and smallgoods	1.1. Range of further processed meat products and small goods is identified and explained. 1.2. Processing techniques involved in the production of these ***products*** are identified and explained. 1.3. ***Hygiene and sanitation*** and quality hazards associated with the production of these products are identified and explained. 1.4. ***Regulatory requirements*** associated with the production of these products are identified and explained.
2. Monitor the preparation of processing equipment and areas	2.1. Procedures are identified for pre-operational ***equipment*** checks conducted in accordance with workplace policies and procedures, and manufacturer's instructions. 2.2. Pre-operational checks and procedures are carried out in accordance with ***workplace requirements*** and regulatory requirements monitored.
3. Monitor the production of smallgoods and further processed meat products	3.1. Ingredients are identified by type and quality according to ***product specifications*** and their function in the process is explained. 3.2. Types of meat, by-product, stock, additive, binder and spices selected are identified according to the formulation specifications and regulatory requirements. 3.3. Handling requirements for ingredients to prevent contamination and to ensure product quality and safety are demonstrated. 3.4. Relevant processing equipment is identified and operating procedures are explained according to manufacturer and work specifications.

	3.5. Relevant temperature, ***options for chilling product***, consistency, and appearance and texture requirements are described and monitored in accordance with product specifications and regulatory requirements.
	3.6. Relevant processing area hygiene and sanitation requirements are monitored as specified in workplace procedures and regulatory requirements.
	3.7. Procedures for rejection, reprocessing and/or recall for products which do not meet specifications or hygiene and sanitation requirements are identified and assessed against regulatory requirements.

Variable	Range
Product	may include: • Comminuted product • cooked and uncooked product • dried product • pickled or brined product • smoked product.
Hygiene and sanitation requirements	may include: • relevant government regulations • workplace requirements.
Regulatory requirements	may include: • Export Control Act • relevant Ethiopian Standards • relevant regulations • requirements in Ethiopian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • federal, state and territory regulations regarding meat processing.
Equipment	may include: • atomising generators • cookers • friction generators • liquid smoke jet • moulds • probe thermometers • sawdust or woodchip burning generators • smoke generators • smokers • sock • wet bulb reservoir.

Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Product specifications	may: • vary according to customer and workplace requirements.
Options for chilling product	may include: • chill cabinets • immersing in ambient running water • placing in cool rooms • showering with ambient water • use of intensive coolers • washing in water or brine.
Communication	may include: • communication with people from a range of cultural, social and ethnic backgrounds • interpreting customer requirements • listening and understanding • speaking clearly and directly • using negotiation, persuasion and assertiveness skills where applicable • reading and interpreting workplace documentation • sharing information and writing to audience needs.
Mathematical skills	may include: • collection • estimation • calculation and interpretation of deviations within cycle • internal temperature • humidity • ambient temperature and weights.

OHS requirements	may include:
	 • enterprise OHS policies, procedures and programs
	 • OHS legal requirements
	 • Personal Protective Equipment (PPE) which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers

	➢ protective hand and arm covering
	➢ protective head and hair covering
	➢ uniforms
	➢ waterproof clothing
	➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice.

Evidence Guide

Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Overview the production of further processed meats and smallgoods • Monitor the preparation of processing equipment and areas • Monitor the production of small goods and further processed meat products
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • hazards to the safe and hygienic manufacture of smallgoods • options for chilling product • process involved in manufacturing smallgoods • procedures required to ensure the product is fit for human consumption and meets regulatory and quality requirements • critical limits in the manufacture of smallgoods • recall procedures, including notification of appropriate authorities
Underpinning Skills	Must demonstrate skills in: • monitor production of processed meats and smallgoods to ensure compliance with workplace and regulatory requirements • apply relevant communication and mathematical skills • work effectively as an individual and as a team member • identify and apply relevant Occupational Health and Safety (OHS), workplace and regulatory requirements • propose and implement solutions to a range of production problems • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat & Meat Products Processing Level IV	
Unit Title	Monitor Meat Preservation Process
Unit Code	**IND MPP4 07 0613**
Unit Descriptor	This unit covers the skills and knowledge required to overview and monitor the hygienic preservation of meat and ensure compliance with quality standards and regulatory requirements.

Elements	Performance Criteria
1. Overview the meat preservation process	1.1. Types of *preservation* processes used by the meat industry are identified and explained.
	1.2. Meat quality required for preservation processes is identified according to customer and *workplace requirements*.
	1.3. Ingredients and *equipment* required for the preservation process are prepared according to product specifications, *hygiene and sanitation*, and safety requirements.
2. Monitor preservation process	2.1. Product and process are inspected and monitored to ensure meat is preserved to specifications, health, hygiene and customer requirements.
	2.2. Equipment or processes involved in the preservation process are monitored regularly at critical control points.
	2.3. Procedures to ensure quality and hygiene of the product are monitored and followed at all times.
	2.4. Procedures for rejection, reprocessing and/or recall for products which do not meet specifications or hygiene requirements are implemented.

Variable	Range
Preservation methods	may include: • Canning • cooking • pickling • refrigeration • smoking.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs)

	• the ability to perform the task to production requirements • work instructions.
Equipment	may include: • canning lines • chillers • cooking facility • injectors • smoke generators • steamers.
Hygiene and sanitation requirements	may include: • relevant government regulations • workplace requirements.
Communication skills	may include: • communicating and working with diverse individuals and groups • interpreting customer requirements • listening and understanding • speaking clearly and directly • negotiation, persuasion and assertiveness where necessary • reading and interpreting workplace documentation • sharing information.
Mathematical skills	may include: • acceptable limits, tolerances, out-of-specification performance, trends • calculation • estimation • measurement and interpretation relating to time, temperature, moisture humidity, ratios, percentages, weight, mass and volume.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing

	➤ work, safety or waterproof footwear • requirements set out in standards and codes of practice.
Regulatory requirements	may include: • domestic or importing country requirements • Export Control Act • hygiene and sanitation requirements • relevant state regulations and Ethiopian Standards • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.
Reporting and recording	may: • be oral or written (with accurate transcription) • be complex and contain information from a range of sources • include graphs, tables, charts and diagrams • include technical workplace and mathematical language and data.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Overview the meat preservation process • Monitor preservation process
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • criteria for rejected, reprocessed or recalled product • process involved in preserving meat in own workplace • critical aspects of meat safety and hygiene in the preservation process • relevant procedures to ensure the preserved meat product is safe and fit for human consumption • reject and recall procedures • impact of the preserving process on product quality, including eating quality • regulatory requirements relating to the preservation of meat and products • reject and recall procedures
Underpinning Skills	Must demonstrate skills to: • identify critical control points in the meat preservation process • apply relevant communication and mathematical skills • maintain currency of knowledge through professional development and self-directed research • work effectively as an individual and as a team member • determine and implement corrective action • identify and apply relevant OHS requirements

	• interpret monitoring data and identify out-of-specification performance or product • monitor the preservation of meat to ensure compliance with workplace and regulatory requirements • record monitoring information accurately • report non-conformances to appropriate personnel • take action to improve own work performance as a result of self-evaluation, feedback from others, or in response to changed work practices or technology
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: Meat and Meat Products Processing Level IV	
Unit Title	**Apply an Understanding of Food Additives**
Unit Code	**IND MPP4 08 0613**
Unit Descriptor	This unit of competence covers the skills and knowledge required to recognize the characteristics and functions of food additives, preservatives, colours and flavours used in food products. This unit is designed to provide an overview of food additives. It is not designed to meet the competence requirements of the person who specifies additives, preservatives, colours or flavours to be used in food. Analysis of the properties of food additives may also be done by a specialist.

Elements	Performance Criteria
1. Identify additives used in food	1.1. Types of food additives and common additives used in food products are identified.
	1.2. Functions of food additives are identified.
	1.3. Legal requirements relating to use of food additives are identified.
	1.4. Legal and quality consequences of incorrect additive addition are identified.
2. Manage use of additives in a production process	2.1. Additives used in product range produced in the production process are identified.
	2.2. Methods of addition are suited to food additive and production requirements.
	2.3. ***Policies and procedures*** are reviewed and/or established for safe handling and addition of food additives.
	2.4. Handling, use and disposal of additives are conducted in accordance with environmental standards.

Variable	Range
Policies and procedures	Handling of food additives, preservatives, colours and flavours and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of OHS and environmental impact
Groupings	include but are not limited to: • preservatives • anti-oxidants • acidulants

	• organoleptic and nutritional modification agents
	• colours and flavours, including synthetic and natural, oil and water soluble and lakes (dispersion in oil - applying to colours only)
	• technological aids

Evidence Guide	
Critical Aspects of Competence	Must demonstrate knowledge and skills competence to: • identify legal, company and quality standards for food additives • identify main additives and groupings • describe the function and user requirements for additives • manage the use of additives to ensure product quality standards are achieved.
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • types of food additives and common additives used in food products • the functions of food additives commonly used in food • coding system used to describe food additives, colours and flavours • legal requirements relating to additives used as established by the Food Standards Code • typical quantities used and related units of measurement • preparation requirements, such as forming and breaking emulsions, and preparation of solutions • addition systems and related equipment requirements • Occupational Health and Safety (OHS)issues related to handling of additives • consequences of incorrect additive addition, including Food Standards Code as it relates to food additives used in a given product range • the quality and food safety hazards of incorrect addition • handling and processing conditions that affect the characteristics of colours and flavours

Underpinning Skills	Demonstrate skills to:
	 • identify common food additives and group them by function
	 • identify common types of additives used in the food industry
	 • identify the functions of food additives commonly used in food, such as:
	   ➢ texture modifying agents
	   ➢ organoleptic and nutritional modifying agents, including flavours, colours, flavour enhancers, sugar-free sweeteners, minerals, vitamins and food acids

	➢ shelf-life enhancing agents, including preservatives, anti-oxidants and food acids ➢ technological aids, including humectants, enzymes, propellants, flour treatment, caking agents and bleaching agents • identify additives, colours and flavours used in product range produced in the workplace, including: ➢ coding system used to describe food additives, colours and flavours ➢ legal requirements relating to additives used as established by the Food Standards Code ➢ function in the food product ➢ typical quantities used and related units of measurement ➢ preparation requirements, and forming and breaking emulsions, and preparation of solutions where required ➢ addition systems and related equipment requirements ➢ health and safety issues related to handling of additives ➢ process recording requirements ➢ consequences of incorrect additive addition, including the Food Standards Code as it relates to food additives used in a given product range • review and/or establish procedures to describe storage, handling and processing conditions that affect the characteristics of colours and flavours, such as: ➢ changes in pH, temperature change, exposure to light/ humidity and packaging materials • review and/or establish procedures to describe the method of preparation and addition of additives to food products produced in the workplace • provide examples of incorrect addition of food additives that could occur in the production process, determine appropriate corrective action within company policy and level of authority • use communication skills to interpret and complete work information to support operations of work team or area • demonstrate and support cooperative work practices 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: Meat and Meat Products Processing Level IV	
Unit Title	**Apply Sensory Analysis in Food Processing**
Unit Code	**IND MPP4 09 0613**
Unit Descriptor	This unit covers the skills and knowledge required to identify sensory evaluation techniques and to use appropriate terminology when describing the organoleptic properties of food.

Elements	Performance Criteria
1 Identify the organoleptic properties of food.	1.1 The five basic tastes (sweet, salty, bitter, sour and umami) are recognized.
	1.2 The textual properties of food are identified.
	1.3 Aromas and flavours are identified.
	1.4 The effect of colour on the visual properties of food is recognized.
2 Confirm the procedures to be used in the sensory evaluation of a food product	2.1 The *purpose of sensory testing* and procedures for various sensory evaluations are outlined.
	2.2 The *testing method* for sensory evaluation is reviewed.
	2.3 The factors influencing sensory evaluation tests are identified.
3 Coordinate a taste panel.	3.1 Panellists are instructed on the procedure
	3.2 Samples are prepared according to sensory testing protocols
	3.3 Appropriate recording documentation is devised or accessed for the sensory evaluation test.
	3.4 Taste panel is organized and run to appropriate standards.
	3.5 Results of the taste panel are recorded for analysis.

Variable	Range
The purpose of sensory testing	Tests may be: flavour, appearance, aroma, texture. The primary flavour characteristics may include: sweet, sour, umamic, bitter, salty.
Testing methods	T may include: • triangular test, duo-trio test, ranking test, paired comparison test, blending test • flavour profile • threshold analysis • discriminative testing, descriptive testing, affective testing

Policies and procedures	Ethiopian and international standards including: • professional association regulations • industry guidelines and codes of practice • Federal food safety regulations • Food Standards Code • ISO Standards • codex alimentaruis

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: • Identify the organoleptic properties of food. • Confirm the procedures to be used in the sensory evaluation of a food product • Coordinate a taste panel.
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • organoleptic properties of food • sensory evaluation of foods • interactions and associated characteristics of sensory abilities • quality requirements for conducting a taste panel • descriptive, discriminative and affective sensory methods • organizational quality procedures for sensory testing
Underpinning Skills	Demonstrates skills to: • identify the organoleptic properties of food • outline the various sensory evaluation tests used in the food processing industry • select an appropriate sensory evaluation test method for a given product • prepare samples for sensory testing • record results in required format • review results for evidence of discrepancies or bias • communicate with and supervise panel lists
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: Meat & Meat Products Processing Level IV	
Unit Title	Implement a Meat Hygiene Assessment Program
Unit Code	**IND MPP4 10 0613**
Unit Descriptor	This unit covers the skills and knowledge required to implement all aspects of a product and process monitoring system in boning room. Process and product monitoring systems are mandatory in all meat industry export works and staff undertaking monitoring duties must be trained in these systems.

Elements	Performance Criteria
1. Monitor car case product	1.1. Samples are selected for assessment according to the approved *sampling plan*. 1.2. Assessment is conducted utilizing appropriate facilities, lighting and time. 1.3. Products are monitored for defects according to the agreed criteria and classification. 1.4. Carcasses are scanned using the approved scanning lines. 1.5. Defects are recorded accurately using the correct forms or electronic system. 1.6. Immediate corrective action is implemented according to the MHA program's requirements. 1.7. Carcasses are monitored according to *workplace requirements* for hygiene and sanitation, and Occupational Health and Safety (OHS).
2. Monitor offal (where applicable to a plant's operations)	2.1. Samples are selected for assessment according to the approved sampling plan. 2.2. Assessment is conducted utilizing appropriate facilities, lighting and time. 2.3. Offal is monitored for defects according to the agreed criteria and classification. 2.4. Defects are recorded accurately using the correct forms or electronic system. 2.5. Levels for triggering corrective actions are identified. 2.6. Immediate corrective action is implemented according to the MHA program's requirements. 2.7. Offal is monitored according to the workplace requirements for hygiene and sanitation, and OHS.

3. Assess carton meat (where applicable to a plant's operations)	3.1. Samples are selected for assessment according to the approved sampling plan.
	3.2. Assessment is conducted utilizing appropriate facilities, lighting and time.
	3.3. Carton meat is monitored for defects according to the agreed criteria and classification.
	3.4. Defects are recorded accurately using the correct forms or electronic system.
	3.5. Levels for triggering corrective actions are identified.
	3.6. Immediate corrective action is implemented according to the MHA program's requirements.
	3.7. Carton meat is monitored according to the workplace requirements for hygiene and sanitation, and OHS.
4. Monitor process	4.1. Process is monitored according to the enterprise monitoring plan.
	4.2. Results are recorded accurately on the appropriate process monitoring sheets.
	4.3. Process is rated according to the **established criteria**.
	4.4. Immediate corrective action is implemented according to the MHA program's requirements.
	4.5. A conformity index is calculated and recorded after each process monitoring exercise.
	4.6. Process is monitored according to the workplace requirements for hygiene and sanitation, and OHS.
	4.7. Results of process monitoring are tracked over time and reconciled with product monitoring outcomes.
5. Analyse data gathered	5.1. Product and process monitoring results are **plotted on simple trend charts**.
	5.2. Product and process monitoring results are **plotted on control charts**.
	5.3. Trends are interpreted and remedial or corrective actions are taken where necessary.
6. Implement MHA program	6.1. Work instructions for monitoring activities are prepared and implemented.
	6.2. Products are monitored for defects according to the MHA program
	6.3. Process are monitored for conformity with the plant's HACCP- based QA system in accordance with the MHA program

Variable	Range
Sampling plan	will include: • Frequency • sample size
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Established criteria for rating the process	include: • acceptable • marginal • unacceptable.
Plotting on simple trend charts	must include showing specified zones as: • acceptable • marginal • unacceptable.
Plotting on control charts	must show: • specified acceptable, marginal and unacceptable zones • upper and lower critical limits.
Communication skills	may include: • communicating with people from a range of cultural, social and ethnic backgrounds • reading and interpreting workplace documentation • speaking clearly and directly • listening and understanding • the preparation of documentation for a specified audience • the use of negotiation and persuasion skills, and being appropriately assertive • the sharing of information.
Mathematical skills	may include: • identifying acceptable limits, tolerances, out-of-specification performance, trends • calculation • estimation • measurements and interpretation that relate to time, temperature, moisture humidity, ratios, percentages, weight/mass/volume.
OHS requirements	may include: • enterprise OHS policies, procedures and programs • OHS legal requirements

	• Personal Protective Equipment (PPE) which may include:
	   ➢ coats and aprons
	   ➢ ear plugs or muffs
	   ➢ eye and facial protection
	   ➢ head-wear
	   ➢ lifting assistance
	   ➢ mesh aprons
	   ➢ protective boot covers
	   ➢ protective hand and arm covering
	   ➢ protective head and hair covering
	   ➢ uniforms
	   ➢ waterproof clothing
	   ➢ work, safety or waterproof footwear
	• requirements set
	• out in standards and codes of practice.

Regulatory requirements	may include: • Export Control Act • Export Meat Orders (EMOs) • hygiene and sanitation requirements • relevant regulations and Ethiopian Standards • requirements in the AS 4969:2007 Ethiopian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • federal, state and territory regulations regarding meat processing.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Monitor car case product • Monitor offal (where applicable to a plant's operations) • Assess carton meat (where applicable to a plant's operations) • Monitor process • Analyse data gathered • Implement MHA program
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • purpose of an MHA program • classification of defects • when and how corrective actions are to be taken in response to monitoring outcomes • types and purpose of control charts • purpose of trend charts • what a trend is and why it is important when monitoring process and product

	• how process compliance monitoring is to be undertaken • how the approved sample plan is implemented for product monitoring • purpose of the process conformity index • types of defects to be identified in carcass, offal and carton product
Underpinning Skills	Must demonstrate skills in: • monitor product for defects according to the MHA program • identify and resolve data inconsistencies • monitor the process for conformity with the plant's HACCP-based QA system in accordance with the MHA program • observe hygiene and sanitation requirements when monitoring product and process • graph and interpret trends in product and process monitoring results • instigate corrective and preventative actions when appropriate • apply relevant communication and mathematical skills • comply with OHS requirements when monitoring product and process • maintain currency of knowledge and techniques through informal learning, regular professional development or personal research • work efficiently as an individual and as a team member • identify and apply relevant OHS and regulatory requirements • provide relevant information to work colleagues to facilitate understanding of, and compliance with, the applicable standards and regulations • record the monitoring results accurately • take action to improve own work practice as a result of self-evaluation, feedback from others, or changed work practices, regulations or technology
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: Meat & Meat Products Processing Level IV	
Unit Title	**Identify, Evaluate and Control Food Safety Hazards**
Unit Code	**IND MPP4 11 0613**
Unit Descriptor	This unit of competency covers the skills and knowledge required to identify, evaluate and control food safety hazards for the purposes of validating specific control measures in a food safety program.

Elements	Performance Criteria
1. Identify food safety hazards in a food business	1.1. ***Biological food safety hazards*** that could present a risk in the food at the point of consumption are identified by type, origin and food association and assessed to determine risk level and control requirements.
	1.2. Intrinsic and extrinsic ***chemical food safety hazards*** that could present a risk in the food at the point of consumption, including toxin presence, are identified by type, origin and food association and assessed to determine risk level and control requirements.
	1.3. ***Physical food safety hazards*** that present a risk in food are identified and assessed to determine control requirements.
2. Control food safety hazards in a food business	2.1. Processing hazards and related control measures and ***Critical control point***, ***critical limits***, monitoring and recording requirements are established and ***validated*** to eliminate or reduce food safety hazards to ***acceptable levels***.
	2.2. Food storage and handling requirements necessary to eliminate or reduce ***food safety hazards*** are determined.
	2.3. Personal hygiene practices required to eliminate or reduce food safety hazards are established.
	2.4. Cleaning and sanitation, housekeeping and pest control practices and procedures required to prevent or reduce food safety hazards are established.
	2.5. Other ***prerequisite programs*** are developed to eliminate or reduce food safety hazards to acceptable levels.

Variable	Range
Biological food safety hazards	include but are not limited to: • Salmonella spp

	• Campylobacter jejuni
	• Bacillus cereus
	• Clostridium perfringens
	• Clostridium botulinum
	• Cryptosporidium
	• Pathogenic escherichia coli
	• Giardia
	• Listeria moncytogenes
	• Shigella spp
	• Staphylococcus aureus
	• Vibrio parahaemolyticus
	• Yersinia enterocolitica
	• Hepatitis A virus
	• Norwalk virus
	• Classifications by type of micro-organism include:
	   ➢ bacteria
	   ➢ viruses
	   ➢ moulds/fungi
	   ➢ parasites
	   ➢ algae

Chemical food safety hazards	may include: • cleaning chemicals • pesticides • veterinary residues • chemical additives • allergenic substances • toxic metals • nitrites, nitrates and N-nitroso compounds • polychlorinated biphenyls (PCBs) • plasticizers and packaging migration • phytotoxins • zootoxins
Physical food safety hazards	• refer to objects not normally found in food which may cause illness or injury to the consumer
Critical control point	• is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level
Critical limit	• refers to criterion which separates acceptability from unacceptability
Validation	• refers to obtaining evidence to confirm that a HACCP-based food safety program is complete and effective and will deliver the expected food safety outcomes
Acceptable levels	are typically defined by: • the Food Standards Code

	• commonwealth, state or territory legislation or codes • industry codes of practice • international protocols (CODEX Alimentarius) • customer food safety requirements (including intended use)
Food safety hazards	Is a biological, chemical, or physical agent in, or condition of, food with the potential to cause an adverse health effect in humans (defined in 'Hazard Analysis and Critical Control Point System and Guidelines for its Application', Codex Alimentarius Commission)

Prerequisite programs	• Are also referred to as support programs, such as Good Manufacturing Practice (GMP), Good Agricultural Practice (GAP) and Good Hygiene Practice (GHP).
	• Prerequisite programs can be divided into two categories.
	• Infrastructure and maintenance programs. These may include:
	  ➢ layout, design and construction of buildings and facilities
	  ➢ supplies of air, water, energy and other utilities
	  ➢ equipment, including preventative maintenance, sanitary design and accessibility for maintenance and cleaning
	  ➢ support services, including waste and sewage disposal
	• Operational prerequisite programs. These may include:
	  ➢ personal hygiene
	  ➢ cleaning and sanitation
	  ➢ pest control
	  ➢ measures for the prevention of cross-contamination
	  ➢ packaging and labelling procedures
	  ➢ supplier assurance
	  ➢ chemical storage
	  ➢ employee training
	  ➢ maintenance
	  ➢ calibration
	  ➢ document control
	  ➢ internal audit programs
	  ➢ traceability and recall programs
	  ➢ on-farm food safety schemes
	  ➢ inspecting and testing regimes, including analytical and microbiological testing

Licensing/certification requirements	• are determined by system owners
Food supply chain	refers to a sequence of stages and operations involved in the production, processing, distribution and handling of food from primary production to consumption
Growth requirements	Factors which influence the growth of pathogenic micro-organisms may include: • temperature

	• water activity
	• gases
	• pH
	• time
	• moisture
	• nutrients
Validation evidence	may include the application of:
	• existing Ethiopian legislative requirements
	• challenge tests
	• peer reviewed scientific papers
	• targeted scientific reports
	• validation already carried out in other jurisdictions and recognised by the responsible authority
	• mathematical modelling (e.g. predictive microbiology models)
	• industry codes of practice (where implementation by food business is verified during audits)

Evidence Guide	
Critical Aspects of Competence	Select a food supply chain and identify:
	• known biological food safety hazards that could occur across the chain and could present a risk in food at the point of consumption
	• likely patterns of growth and transmission from source of contamination to onset of consumer symptoms for pathogens likely to occur in the supply chain, including threshold levels
	• sources of chemical and physical contamination that could present a food safety risk at the time of food consumption, across the chain
	• impact and indicators of the presence of biological or chemical food safety hazards throughout the food chain
	• acceptable levels of contamination. These may be established by reference to relevant legislation and/or reference to system requirements
	• select one stage in the food supply chain (which must be a medium or high risk business or process) and establish or validate control measures and verification records and procedures.
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of:
	• sources of advice and research on foods, processing methods, production technologies and associated food safety hazards and control methods
	• ways in which food can cause illness and injury, including incidence and trends in food-borne illness

	• intrinsic and extrinsic factors that can impact on food safety • common biological food safety hazards (including toxin production and spore formation) and conditions required for survival and growth of each, including growth rates, transmission routes, likely carriers and threshold levels • sources of information on acceptable (and legal) levels of biological, chemical and physical contamination • food supply chains and potential of a breakdown in control at one point to impact other parts of the chain • survival and growth requirements of biological food safety hazards • common allergenic substances as described by the Food Standards Code (and may be additionally defined by system owners) • common control methods necessary to eliminate or reduce the risk of food-borne illness to acceptable levels for each common pathogen, including the role of food storage, temperature control, preservation and process methods, traceability, product shelf-life, cleaning and sanitation, and pest control • methods to detect and minimise the risk of food contamination by personal carriers, including convalescent and symptomless carriers, and related minimum legal illness reporting requirements and personal hygiene procedures • the role of microbiological sampling, swabbing and testing in assessing the presence of biological contamination • methods to determine the appropriateness and effectiveness of control measures and critical limits, including identifying the effect of control measures on the identified food safety hazard, method and feasibility of monitoring, the relationship to other control measures, and the severity of consequences and required corrective action in the event of failure of control • types and causes of acute and chronic chemical food borne illness • the food safety and legal impact of chemical contamination, including residual agricultural and environmental chemicals, residual industrial (including cleaning) chemicals, and chemical contamination as a result of packaging methods and materials • physical hazards that pose a food safety risk • common control methods to eliminate or reduce the risk of chemical or physical food-borne illness to acceptable levels for each common form of chemical and physical food safety hazard, including:

	> chemicals that pose a food safety risk > common food allergens > physical hazards • the role and requirements of prerequisite programs and procedures to eliminate, prevent or reduce biological, chemical and physical food safety hazards to acceptable levels
Underpinning Skills	Must demonstrate skills in: • interpret and apply relevant legislation, codes of practice and technical standards • identify biological, chemical and physical food safety hazards • determine critical control points and critical limits for identified hazards • establish the required procedures, systems and records to monitor critical control points in order to demonstrate that the critical control point is in control • specify required corrective actions and corrections to be taken when critical limits are not achieved
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: Meat & Meat Products Processing Level IV	
Unit Title	**Participate in Ongoing Development and Implementation of a HACCP and Quality Assurance System**
Unit Code	**IND MPP4 12 0613**
Unit Descriptor	This unit covers the skills and knowledge required to develop and manage a Hazard and Critical Control Point (HACCP)-based Quality Assurance (QA) program.

Elements	Performance Criteria
1. Involve management and staff in developing the quality system	1.1. Relevant staff members and management are involved to clarify the purpose and scope of the program. 1.2. Enterprise needs and expectations are clearly defined. 1.3. Occupational Health and Safety (OHS) and meat inspection are incorporated into the system as appropriate to the workplace needs.
2. Establish the scope of the system	2.1. Scope of the HACCP-based quality system is defined to encompass food safety, quality, regulatory compliance, animal welfare and preventative maintenance. 2.2. System is directed to prevent and control food safety hazards and any other hazards such as ***product*** quality and ***OHS*** hazards. 2.3. Agreement is sought from relevant areas of the ***workplace requirements*** on the coverage and scope of the system.
3. Conduct hazard analysis and assessment	3.1. Every step in the production process is assessed for potential food safety hazards. 3.2. Critical Control Points (CCPs) are established to identify where each significant hazard can be prevented or controlled. 3.3. Critical limits are established for each CCP. 3.4. A measurable or recognizable standard is assigned for each CCP to define the critical limits. 3.5. Critical limits are technically and scientifically validated.
4. Ensure all documents, work procedures and processes required for the	4.1. All products and processes covered by the HACCP-based quality system are described in a standardized format defining product characteristics relevant to food safety.

system are developed, available and in use	4.2. Work instructions and Standard Operating Procedures (SOPs) are reviewed for accuracy, relevance and sufficiency to prevent potential hazards.
	4.3. Documented procedures are implemented for monitoring CCPs.
	4.4. Documented procedures which ensure any CCPs which are out of control are brought back into control, and affected product is suitably handled, are implemented.
	4.5. Documented procedures are implemented to ensure the whole HACCP system is regularly audited and verified as working effectively.
	4.6. All documents and records required for the system are available, up-to-date and in use.
5. Audit, verify and validate the system	5.1. HACCP plans are routinely revised, verified and validated to reassess hazards, CCPs, critical limits, microbiological and other testing methods and all related procedures of the HACCP system to ensure they are still appropriate to the plant's operations and products.
	5.2. Follow up on audit findings is taken and recorded.
	5.3. HACCP system is reviewed to take account of any process or product changes.

Variable	Range
Product	may include: • Car case • carton meat • offal • pet meat • rendered product.
OHS requirements	may include: • enterprise OHS policies, procedures and programs • OHS legal requirements • Personal Protective Equipment (PPE) which may include: ➢ coats and aprons ➢ ear plugs or muffs ➢ eye and facial protection ➢ head-wear ➢ lifting assistance ➢ mesh aprons ➢ protective boot covers ➢ protective hand and arm coverings

	> protective head and hair coverings > uniforms > waterproof clothing, work, safety or waterproof footwear • requirements set out in standards, codes of practice etc.
Workplace requirements	will include: • approved arrangements • enterprise-specific requirements • OHS requirements • QA requirements • SOPs • work instructions.
Regulatory requirements	may include: • Export Control Act • importing country requirements • relevant Ethiopian Standards • requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption • federal, state and territory regulations regarding meat processing.
Communication skills	may include: • applying numeracy skills to workplace requirements • being appropriately assertive • empathizing • establishing/using networks • interpreting the needs of internal/external customers • listening and understanding • negotiating responsively • persuading effectively • reading and interpreting workplace documentation • sharing information • speaking clearly and directly • working with diverse individuals and groups • writing to audience needs.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Involve management and staff in developing the quality system • Establish the scope of the system • Conduct hazard analysis and assessment • Ensure all documents, work procedures and processes required for the system are developed, available and in use • Audit, verify and validate the system

Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • objectives of a HACCP-based QA system • process for validating critical limits and CCPs • role of pre-requisite programs and Good Manufacturing Processes (GMPs) in a HACCP-based program • process of auditing and verifying a HACCP-based QA system • steps in the development of a HACCP-based QA system • steps in the systematic introduction of a HACCP-based QA system • documentation required to support a HACCP-based QA system
Underpinning Skills	Must demonstrate skills to: • conduct monitoring of a CCP • use communications technology such as computers, as relevant to the task • develop and implement changes in a HACCP-based QA system • identify and apply relevant OHS, regulatory and workplace requirements • record and analyze monitoring and verification data • use relevant communication skills • validate CCPs and critical limits
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: Meat & Meat Products Processing Level IV	
Unit Title	**Develop and Implement Quality Assurance Program for a Rendering Plant**
Unit Code	**IND MPP4 13 0613**
Unit Descriptor	This unit covers the skills and knowledge required to develop and implement a Quality Assurance (QA) program for a rendering plant.

Elements	Performance Criteria
1. Develop a QA program for rendering plant	1.1. Process flow chart is developed for rendering plant.
	1.2. Control and Critical Control Points (CCPs) are identified.
	1.3. Procedures to be carried out at control and CCPs are identified.
	1.4. Critical limits are validated.
	1.5. Operations manual, monitoring sheets and verification procedures are developed according to *regulatory requirements*.
2. Implement the QA program at the rendering plant	2.1. QA procedures and requirements are clearly explained to relevant personnel according to *workplace requirements*.
	2.2. Staff are coached and mentored in the introduction of work instructions and operating procedures.
	2.3. Verification and recording procedures are introduced and monitored.
	2.4. Internal audit is conducted to verify program.

Variable	Range
Regulatory requirements	may include: • Export Control Act • federal and state regulations regarding meat processing • hygiene and sanitation requirements • relevant Ethiopian Standards • relevant regulations • Requirements set out in Ethiopian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.
Workplace requirements	may include: • enterprise-specific procedures • OHS requirements • QA requirements • SOPs

	• the ability to perform the task to production requirements • work instructions

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs
	  ➢ eye and facial protection
	  ➢ head-wear
	  ➢ lifting assistance
	  ➢ mesh aprons
	  ➢ protective boot covers
	  ➢ protective hand and arm covering
	  ➢ protective head and hair covering
	  ➢ uniforms
	  ➢ waterproof clothing
	  ➢ work, safety or waterproof footwear
	• requirements set out in standards and codes of practice

Communication skills	may include: • applying numeracy skills to workplace requirements • being appropriately assertive • empathizing • establishing/using networks • interpreting the needs of internal/external customers • listening and understanding • negotiating responsively • persuading effectively • reading and interpreting workplace-related documentation • sharing information • speaking clearly and directly • working with diverse individuals and groups • writing to audience needs

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Develop QA programs that must meet the requirements of current Ethiopian Standards and relevant legislation.
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • verification and validation procedures
Underpinning Skills	Must demonstrate skills to: • develop a QA program that meets regulatory and workplace requirements

	• develop an implementation plan • develop and document work instructions and Standard Operating Procedures (SOPs) • establish and validate critical limits • explain the process flow chart for the rendering operation • form, instruct and lead a Hazard Analysis Critical Control Point (HACCP) team • identify and observe Occupational Health and Safety (OHS) requirements where applicable • identify corrective action • identify CCPs for QA monitoring • identify hazards • implement the QA program • mentor staff implementing the procedures • prepare a HACCP chart for rendering operations • use relevant communication skills • verify the program using sampling, testing and auditing
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: Meat & Meat Products Processing Level IV	
Unit Title	**Assess and Evaluate Meat Industry Requirements and Processes**
Unit Code	**IND MPP4 14 0613**
Unit Descriptor	This unit describes the skills and knowledge required to assess and evaluate the role of the Ethiopian meat industry as a part of the food processing sector, and the requirements to work in meat processing.

Elements	Performance Criteria
1. Establish livestock production and transport requirements	1.1. ***Production techniques*** impacting meat quality are explained for the range of ***species*** involved.
	1.2. Role and purpose of ***traceability requirements*** are explained.
	1.3. ***Purchasing process and selling alternatives*** for livestock are explained.
	1.4. Relationship between transport arrangements and meat quality are explained.
	1.5. Potential product quality, animal welfare and food safety hazards from transporting livestock are identified.
2. Identify the sequence of operations for meat processing in an abattoir	2.1. ***Critical elements of the slaughtering process*** are identified.
	2.2. ***Critical elements of the boning process*** are identified.
	2.3. Role and purpose of rendering are explained.
	2.4. Offal processing requirements are explained.
	2.5. Differences between ***export and domestic requirements*** are identified.
3. Explain factors affecting food safety and meat quality during processing	3.1. Key meat safety issues are described.
	3.2. ***Key legislation and regulations*** affecting meat processing are identified.
	3.3. Impacts of seasonal and geographical factors on meat quality are explained.
	3.4. The nature and purpose of the Meat Standards Australia (MSA) program are described.
	3.5. Impacts of further processing on meat quality are explained.
	3.6. Factors affecting shelf life and meat quality are explained.
	3.7. The nature and purpose of a ***meat testing program*** are explained.

4. Identify processes and process controls for a range of meat smallgoods	4.1. Differences between *product sources* are identified.
	4.2. Key *small goods products and production processes* are identified.
	4.3. *Food safety requirements impacting small goods production* are explained.
5. Define the structure and nature of meat retailing in Australia	5.1. Differences between supermarket, independent and wholesale butchers are identified.
	5.2. *Regulatory requirements* directly impacting meat retailing are explained.
	5.3. Key meat product lines and the role of value-adding are identified.
	5.4. The impact of *customer requirements and expectations* are explained.
	5.5. Food safety requirements impacting retail operations are explained.
6. Identify key issues and bodies that impact the Ethiopian meat industry	6.1. Impacts of climatic factors on the meat industry are explained.
	6.2. *Key issues impacting meat industry employment* are explained.
	6.3. *Environmental impacts of a meat processing site* are reviewed.
	6.4. Impacts of *changing customer expectations* are explained.
	6.5. The role of *key industry bodies* is described.

Variable	Range
Production techniques	may include: • location • flock/herd size • feedlots or paddock raised • organic • research trials.
Species to be slaughtered	may include: • cattle • sheep • goats • pigs • horses • rabbits and crocodiles.

Traceability requirements	may include: • National Livestock Identification Scheme (NLIS) • ear and tail tags • state-based requirements • Pig Pass • disease notification • customer requirements, such as Country of Origin Labeling (COOL).
Purchasing process and selling alternatives	may include: • contractual requirements • 'over the hook' • live purchasing in paddock or saleyards • computer selling • major customers (e.g. Woolworths, Tesco, McDonalds) paddock-plate purchasing systems
Critical elements of the slaughtering process	will include: • animal welfare and handling requirements • quality determinants (e.g. stress) • car case description • food safety and testing regimes • stunning and slaughtering procedures • hide removal • evisceration • time and temperature requirements for car case chilling and freezing.
Critical elements of the boning process	will include: • cut descriptions • integrated/independents boning rooms • customer specifications • packaging • refrigeration and freezing requirements • transport arrangements • traceability • micro testing • hygiene and sanitation • physical and micro contamination.
Export and domestic requirements	will include • Approved Arrangements • livestock traceability • micro testing • product traceability and recall arrangements • regulatory and standards frameworks • roles and requirements of Ethiopian Quarantine Inspection Service AQIS and State Meat Authorities

	- Meat Hygiene Assessment (MHA) - Refrigeration Index - MSA - food safety testing regimes - animal welfare - social accountability - food safety - market access - cuts and specifications - religious requirements - kill method - processing and packing procedures - types of packaging - environmental impacts of meat production and processing.
Key legislation and regulations	may include: - Ethiopian Standards - Export Act - Approved Arrangements - State-based legislation - Codes of Practice (e.g. Animal Welfare) - OHS legislation.
Meat testing programs	may include: - microbiological testing - residue testing - species testing - temperature logging - Critical Control Points (CCPs) - National meat Testing laboratory accreditation.
Product sources for smallgoods production	may include: - imported product - Ethiopian product - different species (e.g. cattle, sheep, goats and pigs) - product additives and mixes (e.g. emulsions, spices and nitrites/nitrates).
Smallgoods products and production processes	will include: - smoked product - cooked product - Uncooked Comminuted Fermented Meat UCFM - dried meats - factory-type production techniques - independent retailer production techniques - regulatory requirements - processing equipment.

Food safety requirements impacting smallgoods production	will include: • UCFM • thawing processes • uncooked/cooked product handling requirements • blending/batching processes • packaging requirements • product storage and transport requirements.
Regulatory requirements impacting meat retailing	will include: • role of State and Council authorities • environmental requirements • legislation, regulations and Codes of Practice • OHS, Equal Employment Opportunity (EEO) legislation • Modern Awards • Food Standards Code.
Customer requirements and expectations affecting meat retailing	may include: • species and cuts • packaging • value-adding • religious, dietary and allergen requirements.
Key issues impacting meat industry employment	may include: • labour supply and market characteristics • meat industry career structures • role and nature of training • role of overseas workers • seasonal and market factors • national policies and regulations.
Environmental impacts of a meat processing site	may include: • water use • waste water • emissions, power sources and consumption.
Changing customer expectations may include:	• animal welfare and handling • organic production • social accountability • ethical production and traceability.
Key industry bodies will include:	• state and federal regulators • peak industry bodies • unions covering the • Standards determining bodies: • International Organization for Standardization (ISO)

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge in: • describe the livestock production and marketing, and retailing systems for the meat industry

	• document the sequence of operations for livestock slaughter and meat processing • define processes for a range of meat small goods • describe production factors influencing meat quality and safety • comply with industry requirements for hygiene, OHS and other work practices.
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • factors which impact on meat safety and quality through the supply chain • the main animal welfare issues associated with the production and processing animals for human consumption • main markets for meat • common causes and impact of contamination • relationship between food safety and market access • nature and structure of the Ethiopian meat processing industry • principles of Quality Assurance (QA) and traceability from paddock to retailer • slaughtering and boning processes • nature and purpose of the AUS-MEAT and MSA programs • customer requirements • value-adding of meat products
Underpinning Skills	Must demonstrate skills in: • analyse and interpret work instructions, Standard Operating Procedures (SOPs), safety and hygiene procedures, and other workplace documentation • identify livestock • locate, and interpret industry information • distinguish between meat products and the processes to produce them • identify personal hygiene and operational sanitation procedures • identify and Occupational Health and Safety (OHS) risks • apply sustainable work practices
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: Meat & Meat Products Processing Level IV	
Unit Title	**Manage Transportation of Meat, Meat Products and Meat By-Products**
Unit Code	**IND MPP4 15 0613**
Unit Descriptor	This unit covers the skills and knowledge required to schedule and monitor the hygienic, safe and secure transportation of meat, meat products and meat by-products, for domestic or international markets. The efficient transportation of meat, meat products and meat by-products results in the satisfaction of customer requirements.

Elements	Performance Criteria
1. Implement requirements for the transport of meat, meat products and meat by-products	1.1. Regulatory, customer and enterprise requirements for the hygienic, safe and timely **transportation of meat, meat products and meat by-products** are identified and followed.
	1.2. Resource requirements are assessed and allocated.
2. Establish transport policies and procedures	2.1. Systems and procedures for the operation of meat transport vehicles for the hygienic and safe transport of meat, meat products and meat by-products are developed.
	2.2. Security procedures and systems are developed.
	2.3. Reporting and recording procedures are established and maintained.
	2.4. Supplier quality requirements and standards are developed and monitored.
	2.5. Personnel, including contractors, are informed and mentored in the performance of their obligations and responsibilities, including Occupational Health and Safety (OHS).
3. Manage transport logistics	3.1. Transport options are **analyzed and selected**.
	3.2. **Contracts and schedules** are prepared and negotiated according to customer and production requirements.
	3.3. Documentation is completed according to enterprise, customer and **regulatory requirements**.
	3.4. Transport vehicles are maintained to ensure the hygienic transportation of meat.
	3.5. Enterprise storage facilities are operated according to enterprise and regulatory requirements.
	3.6. Consignments are tracked and monitored.

4. Determine and manage transport costs	4.1. Cost of storage and transport is calculated.
	4.2. Transport budget is prepared and monitored.
	4.3. Procedures for cost savings are reviewed.
5. Manage contingencies	5.1. Contingency plans are developed according to enterprise requirements.
	5.2. Changing circumstances are analyzed, and responses are prioritized and clarified.
	5.3. Impacts of changed schedules are communicated to all relevant parties.
6. Review transport of meat, meat products and meat by-products to improve customer service	6.1. Resources, procedures and schedules are monitored and reviewed for effectiveness and efficiency.
	6.2. Customer feedback and requirements are included in review of transport procedures and schedules.
	6.3. Team is involved in continuous improvement processes.
7. Establish effective communication with customers	7.1. Customer requirements are determined.
	7.2. Customer complaints are resolved promptly.
	7.3. *Problem*-*solving skills* is applied to resolve transportation issues
	7.4. *Communication* strategies are inclusive of the cultural, ethnic and social diversity of individuals and groups.
	7.5 Information is effectively communicated with regulatory authorities and *stakeholders*
8. Produce reports	8.1. *Reports* are produced according to legal and enterprise requirements.
	8.2. Take corrective actions based on the result of the reports.

Variable	Range
Transport	may be: • intrastate • interstate • international • by road, rail, sea or air.
Meat, meat products and meat by-products	may include: • car case and carton meat • fresh, frozen, further processed and rendered products • noxious products

	- small goods - treated and untreated hides - value-added products.
Analysing and selecting transport options	includes: - unit cost size and availability - customer requirements - product requirements and characteristics - route - speed.
Contracts and schedules may be developed for enterprise owned vehicles or contracted vehicles	including: - air transport - rail or container - road transport - sea or container transport.
Regulatory requirements	may include: - animal welfare - Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption - commercial law, including fair trading and trade practices - consumer law - corporate law, including registration, licensing and financial reporting - environmental and waste management, and sustainable work practices - Equal Employment Opportunity (EEO), anti-discrimination and sexual harassment - Export Control Act - Refrigeration and Air-Conditioning Code of Good Practice - Reduction of Emissions of Fluorocarbon Refrigerants in Commercial and Industrial Refrigeration and Air-Conditioning Applications - industrial awards and agreements - relevant regulations - state and federal transport regulations - state regulations regarding meat processing and taxation.
Problem-solving skills	may include: - applying a range of strategies - developing practical and creative solutions - resolving workplace and customer concerns - showing independence and initiative - solving problems individually or in teams - testing assumptions and taking context into account - using mathematical skills to resolve problems.

Communication	may: • be formal or informal and involve face to face and technological or electronic methods • be with culturally, ethnically and socially diverse individuals and groups • involve preparation of reports which may be complex, contain information from a range of technical sources and include mathematical and graphic information and data • involve reading and interpreting workplace documentation • occur in a variety of sensitive, conflictive, collaborative and supportive environments • require analysis and presentation of complex concepts, technical information, mathematical information and other data in simple or complex formats • require persuasion, negotiation and assertiveness skills.
Stakeholders	may include: • company owners, directors, shareholders and financiers • competitors • management and employees • suppliers, customers and consumers • unions and employer associations.
Reports	may be: • complex • contain information from a range of technical sources and include mathematical and graphic information and data.

Mathematical skills	may relate to:
	• technical and financial modeling
	• calculations
	• interpretation and analysis
	• complex actual and hypothetical mathematical information, such as:
	  ➢ product and product quality
	  ➢ financial operations
	  ➢ personnel
	  ➢ operations
	  ➢ sales and turnover
	  ➢ exports.

OHS requirements	may include:
	• enterprise OHS policies, procedures and programs
	• hygiene and sanitation requirements
	• OHS legal requirements
	• Personal Protective Equipment (PPE) which may include:
	  ➢ coats and aprons
	  ➢ ear plugs or muffs

	➤ eye and facial protection ➤ head-wear ➤ lifting assistance ➤ protective boot covers ➤ protective hand and arm covering ➤ protective head and hair covering ➤ uniforms ➤ waterproof clothing ➤ work, safety or waterproof footwear • requirements set out in standards and codes of practice.
Systems for the tracking and trace back of consignment may be manual or electronic and	include: • communication systems • computerized tracking systems • consignment, dispatch and delivery documentation • export documentation • log books and product certification.
Workplace requirements	may include: • enterprise-specific requirements • OHS requirements • Quality Assurance (QA) requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.

Evidence Guide	
Critical Aspects of Competence	Must demonstrate skills and knowledge to: • Implement requirements for the transport of meat, meat products and meat by-products • Establish transport policies and procedures • Manage transport logistics • Determine and manage transport costs • Manage contingencies • Review transport of meat, meat products and meat by-products to improve customer service • Establish effective communication with customers • Produce reports
Underpinning Knowledge and Attitudes	Must demonstrate knowledge of: • food safety requirements for meat and meat product transport vehicles • regulatory and workplace requirements relating to the transportation of meat, meat products and meat by-products • potential impact and costs of inappropriate transportation of meat, meat products and meat by-products, including public liability and loss of custom

	• public and OHS obligations relating to the transport of meat, meat products and meat by-products • requirements for maintaining product quality during transportation
Underpinning Skills	Must demonstrate skills in: • analyze throughput, production, storage requirements, meat safety, product specifications, customer requirements, orders and the purchasing or scheduling of appropriate transport services • apply problem-solving skills to resolve transportation issues • communicate effectively with regulatory authorities and stakeholders • maintain currency of knowledge through independent research or personal development • develop supplier quality criteria including audit requirements for the purchase of transport services • establish systems for the completion and certification of product transport documentation • identify and analyze transportation options; develop procedures to inform enterprise personnel, customers and contractors of changes in schedules • apply relevant mathematical skills • identify and apply relevant OHS requirements • present reports according to legal and enterprise requirements • take action to improve own work practice as a result of feedback from others, self-evaluation, or in response to changed work practices or requirements or technologies • use available communication and information technology systems to monitor transport purchase, schedule and track consignments, collect and analyze performance information • work effectively as an individual and as a team member.
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: Meat & Meat Products Processing Level IV	
Unit Title	**Plan and Organize Work**
Unit Code	**IND MPP4 16 0613**
Unit Descriptor	This unit covers the knowledge, skills and attitude required in planning and organizing work activities in a production application. It may be applied to a small independent operation or to a section of a large organization.

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

	4.4 Reporting requirements are complied with in accordance with recommended format.
	4.5 Timeliness of report is observed.
	4.6 Files are established and maintained in accordance with standard operating procedures.
5. Review and evaluate work plans and activities	5.1 Work plans, strategies and implementation are reviewed based on accurate, relevant and current information.
	5.2 Review is done based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback.
	5.3 Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities.
	5.4 Performance appraisal is conducted in accordance with organization rules and regulations.
	5.5 Performance appraisal report is prepared and documented regularly as per organization requirements.
	5.6 Recommendations are prepared and presented to *appropriate personnel/authorities*.
	5.7 *Feedback mechanisms* are implemented in line with organization policies.

Variable	Range
Objectives	May include but not limited to: • Specific • General
Resources	May include but not limited to: • Personnel • Equipment and technology • Services • Supplies and materials • Sources for accessing specialist advice • Budget
Schedule of work activities	May include but not limited to: • Daily • Work-based • Contractual and Regular
Work methods and practices	May include but not limited to: • Legislated regulations and codes of practice • Industry regulations and codes of practice • Occupational health and safety practices

Work plans	May include but not limited to:
	• Daily work plans
	• Project plans
	• Program plans
	• Resource plans
	• Skills development plans
	• Management strategies and objectives
Standards	May include but not limited to:
	• Performance targets
	• Performance management and evaluation systems
	• Occupational standards
	• Employment contracts
	• Client contracts
	• Discipline procedures
	• Workplace assessment guidelines
	• Internal quality assurance
	• Internal and external accountability and auditing requirements
	• Training Regulation Standards
	• Safety Standards
Appropriate personnel/ authorities	May include but not limited to:
	• Appropriate personnel include:
	• Management
	• Line Staff
Feedback mechanisms	May include but not limited to:
	• Verbal feedback
	• Informal feedback
	• Formal feedback
	• Questionnaire
	• Survey
	• Group discussion

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to:
	• set objectives
	• plan and schedule work activities
	• implement work plans
	• monitor work activities
	• review and evaluate work plans and activities
Underpinning Knowledge and Attitudes	Demonstrates knowledge of:
	• organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities
	• organizations policies, strategic plans, guidelines related to the role of the work unit
	• team work and consultation strategies

Underpinning Skills	Demonstrates skill to:
	• plan
	• lead
	• organize
	• coordinate
	• communicate
	• inter-and intra-person/motivation skills
	• present
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	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: Meat & Meat Products Processing Level IV	
Unit Title	**Migrate to New Technology**
Unit Code	**IND MPP4 17 0613**
Unit Descriptor	This unit defines the competence required to apply skills and knowledge in using new or upgraded technology. The rationale behind this unit emphasizes the importance of constantly reviewing work processes, skills and techniques in order to ensure that the quality of the entire business process is maintained at the highest level possible through the appropriate application of new technology. To this end, the person is typically engaged in on-going review and research in order to discover and apply new technology or techniques to improve aspects of the organization's activities.

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

Variable	Range
Environmental Considerations	May include recycling, safe disposal of packaging (e.g. cardboard, polystyrene, paper, plastic) and correct disposal of waste materials by an authorized body

Feedback	May include but is not limited to:
	• surveys,
	• questionnaires,
	• interviews and meetings

Evidence Guide	
Critical Aspects of Competence	Competence must confirm the ability to transfer the application of existing skills and knowledge to new technology
Underpinning Knowledge and Attitudes	Demonstrate knowledge of:
	• Broad awareness of current technology trends and directions in the industry (e.g. systems/procedures, services, new developments, new protocols)
	• Vendor product directions
	• Ability to locate appropriate sources of information regarding metal manufacturing and new technologies
	• Current industry products/services, procedures and techniques with knowledge of general features
	• Information gathering techniques
Underpinning Skills	Demonstrate skills of:
	• Research skills for identifying broad features of new technologies
	• Ability to assist in the decision making process
	• Literacy skills in regard to interpretation of technical manuals
	• Ability to solve known problems in a variety of situations and locations
	• Evaluate and apply new technology to assist in solving organizational problems
	• General analytical skills in relation to known problems
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through:
	• 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: Meat & Meat Products Processing Level IV	
Unit Title	**Establish Quality Standards**
Unit Code	**IND MPP4 18 0613**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to establish quality specifications for work outcomes and work performance. It includes monitoring and participation in maintaining and improving quality, identifying critical control points in the production of quality output and assisting in planning and implementing of quality assurance procedures.

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

5. Monitor quality of work outcome	5.1 Quality requirements are identified
	5.2 Inputs are inspected to confirm capability to meet quality requirements
	5.3 Work is conducted to produce required outcomes
	5.4 Work processes are monitored to confirm quality of output and/or service
	5.5 Processes are adjusted to maintain outputs within specification.
6. Participate in maintaining and improving quality at work	6.1 Work area, materials, processes and product are routinely monitored to ensure compliance with quality requirements
	6.2 Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements
	6.3 Corrective action is taken within level of responsibility, to maintain quality standards
	6.4 Quality issues are raised with designated personnel
7. Report problems that affect quality	7.1 Potential or existing quality problems are recognized.
	7.2 Instances of variation in quality are identified from specifications or work instructions.
	7.3 Variation and potential problems are reported to supervisor/manager according to enterprise guidelines.

Variable	Range
Sourced	May include but is not limited to: • End-users • Customers or stakeholders
Legislated requirements	May include but is not limited to: • Verification of product quality as part of consumer legislation or specific legislation related to product content or composition.
Safety procedures.	May include but is not limited to: • Use of tools and equipment for fabrication/production/ manufacturing works • Workplace environment and handling of material safety, • Following occupational health and safety procedures designated for the task • Respect the policies, regulations, legislations, rule and procedures for manufacturing/production/fabrication works

Evidence Guide	
Critical Aspect of Competence	Demonstrates skills and knowledge to: • Monitor quality of work • Establish quality specifications for product • Participate in maintaining and improving quality at work • Identify hazards and critical control points in the production of quality product • Assist in planning of quality assurance procedures • Report problems that affect quality • Implement quality assurance procedures
Underpinning Knowledge	Demonstrates knowledge of: • work and product quality specifications • quality policies and procedures • improving quality at work • hazards and critical points of operation • obtaining and using information • applying federal and regional legislation within day-today work activities • accessing and using management systems to keep and maintain accurate records • requirements for correct preparation and operation • technical writing
Underpinning Skills	Demonstrates skills to: • monitor quality of work • establish quality specifications for product • participate in maintaining and improving quality at work • identify hazards and critical control points in the production of quality product • assist in planning of quality assurance procedures • report problems that affect quality • implement quality assurance procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	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: Meat & Meat Products Processing Level IV	
Unit Title	**Develop Individuals and Team**
Unit Code	**IND MPP4 19 0613**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to determine individual and team development needs and facilitate the development of the workgroup.

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

4. Develop team commitment and cooperation	4.1 Open communication processes to obtain and share information is used by team.
	4.2 Decisions are reached by the team in accordance with its agreed roles and responsibilities.
	4.3 Mutual concern and camaraderie are developed in the team.
5. Facilitate accomplishment of organizational goals	5.1 Team members are actively participated in team activities and communication processes.
	5.2 Individual and joint responsibility is developed by teams' members for their actions.
	5.3 Collaborative efforts are sustained to attain organizational goals.

Variable	Range
Learning and development needs	May include but is not limited to: • Coaching, monitoring and/or supervision • Formal/informal learning program • Internal/external training provision • Work experience/exchange/opportunities • Personal study • Career planning/development • Performance evaluation • Workplace skills assessment & Recognition of prior learning
Organizational requirements	May include but is not limited to: • Quality assurance and/or procedures manuals • Goals, objectives, plans, systems and processes • Legal and organizational policy/guidelines and requirements • Safety policies, procedures and programs • Confidentiality and security requirements • Business and performance plans • Ethical standards • Quality and continuous improvement processes and standards
Feedback on performance	May include but is not limited to: • Formal/informal performance evaluation • Obtaining feedback from supervisors and colleagues • Obtaining feedback from clients • Personal and reflective behavior strategies • Routine and organizational methods for monitoring service delivery
Learning delivery methods	May include but is not limited to: • On the job coaching or monitoring

	• Problem solving
	• Presentation/demonstration
	• Formal course participation
	• Work experience and involvement in professional networks
	• Conference and seminar attendance

Evidence Guide	
Critical Aspects of Competence	• identify and implement learning opportunities for others • give and receive feedback constructively • facilitate participation of individuals in the work of the team • negotiate plans to improve the effectiveness of learning • prepare learning plans to match skill needs • access and designate learning opportunities
Underpinning Knowledge and Attitude	• coaching and monitoring principles • how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective • how to facilitate team development and improvement • methods and techniques to obtain and interpreting feedback • methods for identifying and prioritizing personal development opportunities and options • career paths and competence standards in the industry
Underpinning Skills	• read and understand a variety of texts, preparing general information and documents according to target audience; spell with accuracy; use grammar and punctuation effective relationships and conflict management • communicate including receiving feedback and reporting, maintaining effective relationships and conflict management • plan and organize required resources and equipment to meet learning needs • coach and mentor skills to provide support to colleagues • report to organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes • facilitate and conduct small group training sessions • relate to people from a range of social, cultural, physical and mental backgrounds
Resource Implications	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: Meat & Meat Products Processing Level IV	
Unit Title	**Utilize Specialized Communication Skills**
Unit Code	**IND MPP4 20 0613**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to use specialized communication skills to meet specific needs of internal and external clients, conduct interviews, facilitate group discussions, and contribute to the development of communication strategies.

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

4. Facilitate group discussion	4.1 Mechanisms which enhance **effective group interaction** are defined and implemented.
	4.2 Strategies which encourage all group members to participate are used routinely.
	4.3 Objectives and agenda are routinely set and followed for meetings and discussions.
	4.4 Relevant information are provided to group to facilitate outcomes.
	4.5 Evaluation of group communication strategies is undertaken to promote participation of all parties.
	4.6 Specific communication needs of individuals are identified and addressed.
5. Conduct interview	5.1 A range of appropriate communication strategies are employed in **interview situations**.
	5.2 Different **types of interview** are conducted in accordance with the organizational procedures.
	5.3 Records of interviews are made and maintained in accordance with organizational procedures.
	5.4 Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated.

Variable	Range
Strategies	May include but is not limited to: • Recognizing own limitations • Utilizing techniques and aids • Providing written drafts • Verbal and non verbal communication
Effective group interaction	May include but is not limited to: • Identifying and evaluating what is occurring within an interaction in a non-judgmental way • Using active listening • Making decision about appropriate words, behavior • Putting together response which is culturally appropriate • Expressing an individual perspective • Expressing own philosophy, ideology and background and exploring impact with relevance to communication
Interview situations	May include but is not limited to: • Establish rapport • obtain facts and information • Facilitate resolution of issues • Develop action plans & Diffuse potentially difficult situation

Types of Interview	May include but is not limited to:
	• Related to staff issues
	• Routine
	• Confidential
	• Evidential
	• Non-disclosure
	• Disclosure

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to:
	• Demonstrate effective communication skills with clients and work colleagues accessing service
	• Adopt relevant communication techniques and strategies to meet client particular needs and difficulties
Underpinning Knowledge and Values	Demonstrates knowledge of:
	• communication process
	• dynamics of groups and different styles of group leadership
	• communication skills relevant to client groups
Underpinning Skills	Demonstrates skills of:
	• full range of communication techniques including:
	➢ active listening
	➢ feedback
	➢ interpretation
	➢ role boundaries setting
	➢ negotiation
	➢ establishing empathy
	➢ communication strategies
	• communicate to fulfill job roles as specified by the organization
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through:
	• 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: Meat & Meat Products Processing Level IV	
Unit Title	**Manage and Maintain Small/Medium Business Operations**
Unit Code	**IND MPP4 21 0613**
Unit Descriptor	This unit covers the operation of day-to-day business activities in a micro or small business. The strategies involve developing, monitoring and managing work activities and financial information, developing effective work habits, and adjusting work schedules as needed.

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

	4.5 Invoices and payments are prepared and distributed in a timely manner and in accordance with legal requirements.
	4.6 Outstanding accounts are collected or followed-up on.
5. Evaluate work performance	5.1 Opportunities for improvements are monitored according to business demands.
	5.2 Work schedules are adjusted to incorporate necessary modifications to existing work and routines or changing needs and requirements.
	5.3 Proposed changes are clearly communicated and recorded to aid in future planning and evaluation.
	5.4 Relevant codes of practice are used to guide an ethical approach to workplace practices and decisions.

Variable	Range
Resources	May include but is not limited to: • staff • money • time • equipment • space
Business goals	May include but is not limited to: • sales targets • budgetary targets • team and individual goals • production targets • reporting deadlines
Problem solving techniques	May include but is not limited to: • gaining additional research and information to make better informed decisions • looking for patterns • considering related problems or those from the past and how they were handled • eliminating possibilities • identifying and attempting sub-tasks • collaborating and asking for advice or help from additional sources
Time management strategies	May include but is not limited to: • prioritizing and anticipating • short term and long term planning and scheduling • creating a positive and organized work environment • clear timelines and goal setting that is regularly reviewed and adjusted as necessary

	• breaking large tasks into smaller tasks • getting additional support if identified and necessary
Internal and external sources	May include but is not limited to: • staff and colleagues • management, supervisors, advisors or head office • relevant professionals such as lawyers, accountants, management consultants • professional associations

Evidence Guide	
Critical Aspects of Competence	A person must be able to demonstrate: • ability to identify daily work requirements and allocate work appropriately • ability to interpret financial documents in accordance with legal requirements
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • Federal and Local Government legislative requirements affecting business operations, especially in regard to Occupational Health and Safety (OHS), equal employment opportunity, industrial relations and anti-discrimination • technical or specialist skills relevant to the business operation • relevant industry code of practice • planning techniques to establish realistic timelines and priorities • identification of relevant performance measures • quality assurance principles and methods • relevant marketing, management, sales and financial concepts • methods for monitoring performance and implementing improvements • structured approaches to problem solving, idea management and time management
Underpinning Skills	Demonstrate skills to: • interpret legal requirements, company policies and procedures and immediate, day-to-day demands • communicate using questioning, clarifying, reporting, and giving and receiving constructive feedback • numeracy skills for performance information, setting targets and interpreting financial documents and reports • technical and analytical skills to interpret business document, reports and financial statements and projections • relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities • solve problem and develop contingency plans

	- using computers and software packages to record and manage data and to produce reports - evaluate using assessment work and outcomes - observe for identifying appropriate people, resources and to monitor work
Resource Implications	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: Meat & Meat Products Processing Level IV	
Unit Title	Apply Problem Solving Techniques and Tools
Unit Code	IND MPP4 22 0613
Unit Descriptor	This unit of competency covers the knowledge, skills and attitude required to apply scientific problem solving techniques and tools to enhance quality, productivity and other kaizen elements on continual basis.

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

	4.6 All possible ways are listed using ***creative idea generation*** to eliminate the most critical root cause.
	4.7 The suggested solutions are carefully tested and evaluated for potential complications.
	4.8 Detailed summaries of the action plan are prepared to implement the suggested solution.
5. Examine countermeasures and their implementation.	5.1 Action plan is implemented by ***medium KPT*** members.
	5.2 Implementation is monitored according to the agreed procedure and activities are checked with preset plan.
6. Assess effectiveness of the solution.	6.1 ***Tangible and intangible results*** are identified.
	6.2 The results are verified over time.
	6.3 Tangible results are compared with targets using ***various types of diagram***.
7. Standardize and sustain operation.	7.1 If the goal is achieved, the new procedures are standardized and made part of daily activities.
	7.2 All employees are trained on the new ***Standard Operating Procedures (SOPs)***.
	7.3 SOP is verified and followed by all employees.
	7.4 The next problem is selected to be tackled by the team.

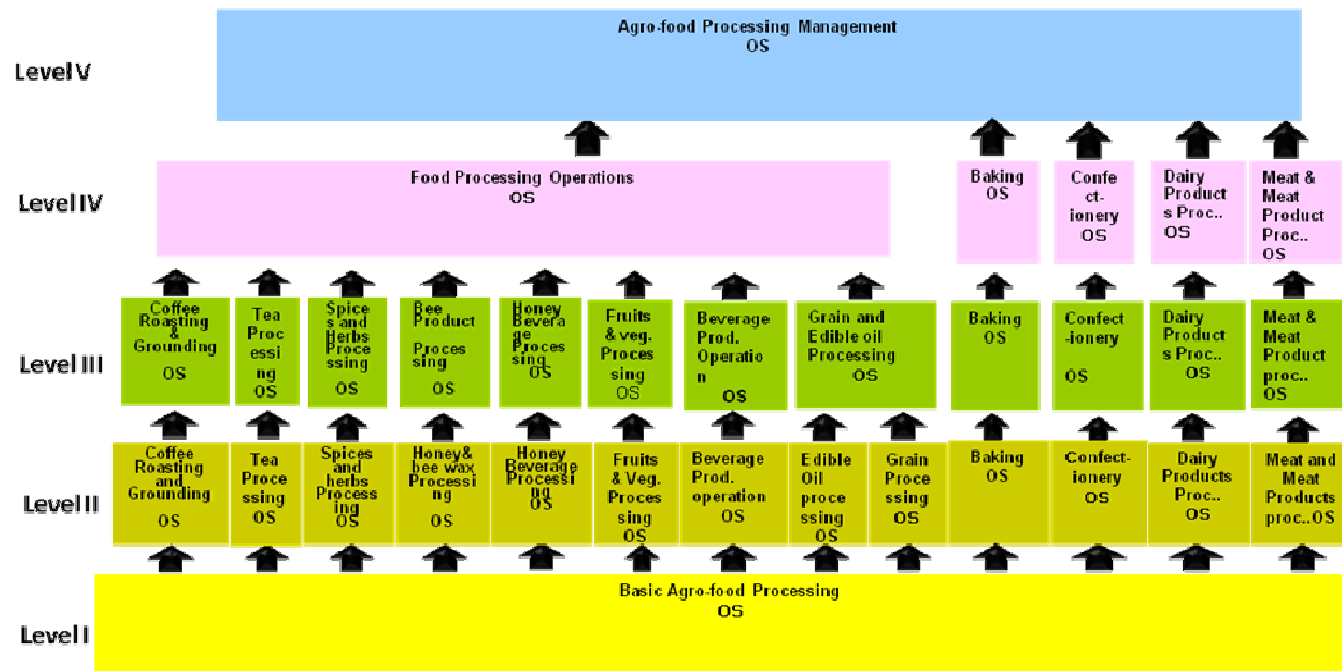| Variable	Range
Safety requirements	may include but not limited to: • OHS requirements include legislation, material safety, managements system, hazardous substances and dangerous goods code and local safe operating procedures • Work is carried out in accordance with legislative obligations, environmental legislations, relevant health regulation, manual handling procedure and organization insurance requirements

Statistical tools and techniques	may include but not limited to:
	• 7 QC tools may include:
	    ➢ Stratification
	    ➢ Pareto Diagram
	    ➢ Cause and Effect Diagram
	    ➢ Check Sheet
	    ➢ Control Chart/Graph
	    ➢ Histogram
	    ➢ Scatter Diagram
	• QC techniques may include:

	➤ Brain storming
	➤ Why analysis
	➤ What if analysis
	➤ 5W1H
Kaizen Elements	may include but not limited to:
	• Quality
	• Cost
	• Productivity
	• Delivery
	• Safety
	• Moral
	• Environment
	• Gender equality
5W1H	may include but not limited to:
	• Who: person in charge
	• Why: objective
	• What: item to be implemented
	• Where: location
	• When: time frame
	• How: method
4M1E	may include but not limited to:
	• Man
	• Machine
	• Method
	• Material and
	• Environment
Creative idea generation	may include but not limited to:
	• Brainstorming
	• Exploring and examining ideas in varied ways
	• Elaborating and extrapolating
	• Conceptualizing
Medium KPT	may include but not limited to:
	• 5S
	• 4M (machine, method, material and man)
	• 4P (Policy, procedures, People and Plant)
	• PDCA cycle
	• Basics of IE tools and techniques
Tangible and intangible results	may include but not limited to:
	• Tangible result may include:
	➤ Quantifiable data
	• Intangible result may include:
	➤ Qualitative data
Various types of diagram	may include but not limited to:
	• Line graph

	• Bar graph
	• Pie-chart
	• Scatter diagram
	• Affinity diagram
Standard Operating Procedures (SOPs)	may include but not limited to:
	• The customer demand
	• The most efficient work routine (steps)
	• The cycle times required to complete work elements
	• All process quality checks required to minimize defects/errors
	• The exact amount of work in process required

Evidence Guide	
Critical Aspects of Assessment	Demonstrates skills and knowledge competencies to: • Apply all relevant procedures and regulatory requirements to ensure quality and productivity of an organization. • Detect non-conforming products/services in the work area • Apply effective problem solving approaches/strategies. • Implement and monitor improved practices and procedures • Apply statistical quality control tools and techniques.
Underpinning Knowledge and Attitude	Demonstrates knowledge of: • QC story/PDCA cycle/ • QC story/ Problem solving steps • QCC techniques • 7 QC tools • Basic IE tools and techniques. • SOP • Quality requirements associated with the individual's job function and/or work area • Workplace procedures associated with the candidate's regular technical duties • Relevant health, safety and environment requirements • organizational structure of the enterprise • Lines of communication • Methods of making/recommending improvements. • Reporting procedures
Underpinning Skills	• Apply problem solving techniques and tools • Apply statistical analysis tools • Apply Visual Management Board/Kaizen Board. • Detect non-conforming products or services in the work area • Document and report information about quality, productivity and other kaizen elements.

	• Contribute effectively within a team to recognize and recommend improvements in quality, productivity and other kaizen elements. • Implement and monitor improved practices and procedures. • Organize and prioritize activities and items. • Read and interpret documents describing procedures • Record activities and results against templates and other prescribed formats.
Resources Implication	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

Agro-food Processing Management OS — Level V

Food Processing Operations OS — Baking OS — Confectionery OS — Dairy Products Proc.. OS — Meat & Meat Product Proc.. OS — Level IV

Level III:
Coffee Roasting & Grounding OS | Tea Processing OS | Spices and Herbs Processing OS | Bee Product Processing OS | Honey Beverage Processing OS | Fruits & veg. Processing OS | Beverage Prod. Operation OS | Grain and Edible oil Processing OS | Baking OS | Confectionery OS | Dairy Products Proc.. OS | Meat & Meat Product proc.. OS

Level II:
Coffee Roasting and Grounding OS | Tea Processing OS | Spices and herbs Processing OS | Honey & bee wax Processing OS | Honey Beverage Processing OS | Fruits & Veg. Processing OS | Beverage Prod. operation OS | Edible Oil processing OS | Grain Processing OS | Baking OS | Confectionery OS | Dairy Products Proc.. OS | Meat and Meat Products proc.. OS

Basic Agro-food Processing OS — Level I

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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.
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