PROCESS PIG PRODUCTS AND BY-PRODUCTS

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UNIT DESCRIPTION

This unit covers the competencies required to produce pig products and by-products. It involves identifying pig products and pig by-products to produce and identifying and preparing processing raw materials. It also entails processing meat to produce various pig products and processing pig waste products such as blood to produce pig by-products such as blood meal.

This standard applies in the pig production industry.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes which make up workplace function.	These are assessable statements which specify the required level of performance for each of the elements. **_Bold and italicized terms are elaborated in the Range._**
1. Collect market data and information	1.1 Data and information collection tools are obtained based on data to be collected. 1.2 **_Data and information collection tools_** are distributed based on workplace instructions. 1.3 Collected data and information is organized and analysed in accordance with acceptable/appropriate statistical procedures. 1.4 Survey report is prepared and recommendations given based on findings. 1.5 Market feedback is shared based on workplace procedures.

2. Identify products and by-products to produce	2.1 Pig products identified based on market survey report.
	2.2 List of products and by-products to produce is developed based on survey recommendation.
3. Identify and prepare processing raw materials	3.1. Necessary permits and certifications are obtained based legal and statutory requirements.
	3.2. Operational resources are identified and gathered based on expected products.
	3.3. Production resources are allocated based on the products to be produced.
	3.4. Production schedules are developed based on plant capacity and market demand.
4. Process meat to produce various pig products	4.1. PPEs are identified and worn based on job requirements.
	4.2. Pigs for processing are identified and selected based on age and weight.
	4.3. Pigs for slaughtering are prepared based on the standard operation procedures
	4.4. Selected pigs are slaughtered as per standard operating procedures
	4.5. Carcass inspection is done based on legal requirements.
	4.6. Pig products are processed based on recipe and processing chart, in accordance with standard operating procedures.
	4.7. Mechanisms to assure food safety and hygiene are implemented based on legal and statutory requirements.
	4.8. Pig products are packaged and stored based on type and product requirements.

5. Process pig waste products to produce pig by-products	5.1 PPEs are identified and worn based job requirements.
	5.2 Raw materials for pig by-product production are obtained and sorted based on end products.
	5.3 Pig by-products are processed as per standard processing procedures.
	5.4 Pig by-products are packaged and stored based on product requirements.
	5.5 Waste is managed based on type, in due regard to environmental protection laws and regulations.
	5.6 Production records and report are prepared and maintained as per workplace policy.

RANGE OF VARIABLES

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

VARIABLE	RANGE
1. Permits and certifications May include but not limited to:	- Movement permits - No objection permits - Meat inspection permits - Food and hygiene certificate - Meat transportation permit
2. Production resources May include but not limited to:	- Raw materials - Tools and equipment - Supplies - Funds - Human resources

	• Operational resources
3. Processed pig products May include but not limited to:	• Sausages • Bacon • Lard • Cuts • Brawn • Smokies • Burgers
4. Cuts May include but not limited to:	• Ham • Loin • Ribs • Belly • Head • Trotters • Offal
5. By-products May include but not limited to:	• Blood meal • Bone meal • Biogas • Manure • Brushes • Buttons • Leather
6. Legal requirements May include but not limited to:	• Public health Act Cap 242 • EMCA 1999 • NEMA regulations • Meat control Act Cap 365 • Factories Act Cap 514 • OSH Act 2007 • Animal welfare Act Cap 360

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Communication
- Interpersonal
- Critical thinking
- Analytical
- Problem-solving
- Decision making
- Marketing
- Tool handling
- Machine operation
- Meat processing

Required knowledge

The individual needs to demonstrate knowledge of:

- Types of pig products
- Terms of reference
- Environmental law
- Socio-cultural and religious beliefs
- Marketing of pork and pork products
- Standard operating procedures for food products – local & export market
- Pig handling and slaughter operations
- Food safety and hygiene
- Pork value chain
- Technology of various pig products and by-products
- Food quality assurance
- Legal and statutory requirements in food processing
- Documentation in food processing

- Packaging and storage
- Waste management
- Tools, equipment and supplies in pig processing

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical aspects of Competency	1. 1 Assessment requires evidences that the candidate:
	1. 2 Collected and analyzed data using appropriate tools.
	1. 3 Prepared and documented appropriate products and by-products for production.
	1. 4 Identified and obtained appropriate permits and certifications.
	1. 5 Identified and selected appropriate operational and production resources.
	1. 6 Prepared comprehensive and workable production schedules.
	1. 7 Identified and selected pigs for slaughtering and processing appropriately.
	1. 8 Observed processing statutory requirements.
	1. 9 Managed and disposed waste appropriately.
	1. 10 Prepared and documented pig processing records appropriately.
	1. 11 Demonstrated understanding of pig handling and slaughter operations.
	1. 12 Demonstrated understanding of food safety and hygiene principles.
	1. 13 Demonstrated understanding of pig value chain.
	1. 14 Demonstrated understanding of technology pig products and by-products processing.
	1. 15 Demonstrated understanding of use and handling of tools, equipment and supplies in pig processing.

		1. 16 Demonstrated understanding of safety and security in the workplace.
2.	Resource implications for competence certification	The following resources **MUST** be provided: 2.1 Access to the relevant workplace where assessment can take place 2.2 Appropriately simulated environment where assessment can take place 2.3 Materials relevant to the proposed activity or tasks
3.	Methods of Assessment	Competency may be assessed through: 3.1 Observation 3.2 Written test 3.3 Interview 3.4 Oral questions 3.5 Third party report 3.6 Project
4.	Context for Assessment	Assessment may be conducted in: 4.1 On-the-job 4.2 Off-the-job 4.3 Workplace attachment
5.	Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.