## **COMPETENCY STANDARDS**

### SEAMER OPERATION LEVEL II



AGRICULTURE, FORESTRY AND FISHERY SECTOR

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY

East Service Road, South Luzon Expressway (SLEX), Taguig City, Metro Manila

# . TABLE OF CONTENTS AGRICULTURE, FORESTRY AND FISHERY SECTOR

#### **SEAMER OPERATION LEVEL II**

Page No.

## TRAINING REGULATIONS FOR SEAMER OPERATION LEVEL II

#### SECTION 1 SEAMER OPERATION LEVEL II QUALIFICATION

The Seamer Operation Level II Qualification consists of competencies that a person must achieve to conduct preparatory activities, perform seaming and perform quality control.

It also includes competencies of a person must have to be able to practice occupational safety procedures, 7S of Good Housekeeping and observing environmental rules and regulations in waste management in all activities.

The qualification is packaged from the competency map of the Agriculture, Forestry and Fishery Sector as shown in Annex A.

The units of competency comprising this qualification include the following:

Code	BASIC COMPETENCIES			
400311210	Participate in workplace communication			
400311211	Work in team environment			
400311212	Solve/address general workplace problems			
400311213	Develop career and life decisions			
400311214	Contribute to workplace innovation			
400311215	Present relevant information			
400311216	Practice occupational safety and health policies and procedures			
400311217	Exercise efficient and effective sustainable practices in the workplace			
400311218	Practice entrepreneurial skills in the workplace			
Code	COMMON COMPETENCIES			
PFB751210	Apply Food Safety and Sanitation			
PFB751211	Use Standard Measuring Devices / Instruments			
PFB751212	Use Food Processing Tools, Equipment and Utensils			
PFB751213	Perform Mathematical Computation			
PFB751214	Implement Good Manufacturing Practice Procedure			
PFB751215	Implement Environmental Policies and Procedures			
Code	CORE COMPETENCIES			
AFFXXXXXX	Conduct preparatory activities			
AFFXXXXXX	Perform seaming operation			
AFFXXXXXX	Perform quality control			

A person who has achieved this Qualification is competent to be:

Seamer Operator

#### SECTION 2 COMPETENCY STANDARDS

This section gives the details of the contents of the basic, common and core units of competency required in **SEAMER OPERATION LEVEL II.** 

#### **BASIC COMPETENCIES**

UNIT OF COMPETENCY: PARTICIPATE IN WORKPLACE COMMUNICATION

UNIT CODE : 400311210

**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 Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
Obtain and convey workplace information	<ul> <li>1.1 Specific and relevant information is accessed from appropriate sources</li> <li>1.2 Effective questioning, active listening and speaking skills are used to gather and convey information</li> <li>1.3 Appropriate medium is used to transfer information and ideas</li> <li>1.4 Appropriate nonverbal communication is used</li> <li>1.5 Appropriate lines of communication with supervisors and colleagues are</li> </ul>	<ul> <li>1.1 Effective verbal and nonverbal communication</li> <li>1.2 Different modes of communication</li> <li>1.3 Medium of communication in the workplace</li> <li>1.4 Organizational policies</li> <li>1.5 Communication procedures and systems</li> <li>1.6 Lines of Communication</li> <li>1.7 Technology relevant to the enterprise and the individual's work responsibilities</li> <li>1.8 Workplace etiquette</li> </ul>	<ul> <li>1.1 Following simple spoken language</li> <li>1.2 Performing routine workplace duties following simple written notices</li> <li>1.3 Participating in workplace meetings and discussions</li> <li>1.4 Preparing work- related documents</li> <li>1.5 Estimating, calculating and recording routine workplace measures</li> <li>1.6 Relating/ Interacting with people of various levels in the workplace</li> <li>1.7 Gathering and providing basic information in response to workplace requirements</li> <li>1.8 Basic business writing skills</li> </ul>

	identified and		1.9 Interpersonal skills in the
	followed		workplace
	1.6 Defined workplace		1.10 Active-listening skills
	procedures for the		
	location and		
	storage of information are used		
	1.7 Personal		
	interaction is carried		
	out clearly and		
	concisely		
2. Perform	2.1 Written notices and	2.1 Effective verbal and	2.1 Following simple spoken
duties	instructions are read	non-verbal	instructions
following	and interpreted in	communication	2.2 Performing routine
workplace	accordance with organizational	2.2 Different modes of	workplace duties
instructions	guidelines	communication	following simple written
	2.2 Routine written	2.3 Medium of	notices
	instruction are	communication in	2.3 Participating in
	followed based on established	the workplace	workplace meetings and discussions
	procedures	2.4 Organizational/ Workplace policies	2.4 Completing work- related
	2.3 Feedback is given to	2.5 Communication	documents
	workplace	procedures and	2.5 Estimating, calculating
	supervisor based instructions/	systems	and recording routine
	information received	2.6 Lines of	workplace measures
	2.4 Workplace	communication	2.6 Relating/ Responding to
	interactions are	2.7 Technology relevant	people of various levels
	conducted in a courteous manner	to the enterprise and	in the workplace
	2.5 Where necessary,	the individual's work	2.7 Gathering and providing
	clarifications about	responsibilities	information in response
	routine workplace	2.8 Effective	to workplace requirements
	procedures and matters concerning	questioning techniques	2.8 Basic
	conditions of	(clarifying and	questioning/querying
	employment are	probing)	2.9 Skills in reading for
	sought and asked	2.9 Workplace etiquette	information
	from appropriate sources		2.10 Skills in locating
			Ĭ
	2.6 Meetings outcomes		
	are interpreted and implemented		
3. Complete	3.1 Range of <i>forms</i>	3.1 Effective verbal and	3.1 Completing work- related
relevant	relating to	non-verbal	documents
work	conditions of	communication	3.2 Applying operations of
related	employment are	3.2 Different modes of	addition, subtraction,
documents	completed	communication	division and
	accurately and legibly	3.3 Workplace forms	multiplication
	legibly	and documents	

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3.2	Workplace data is	3.4 Organizational/	3.3 Gathering and providing
	recorded on	Workplace policies	information in response
	standard workplace	3.5 Communication	to workplace
	forms and	procedures and	requirements
	documents	systems	3.4 Effective record keeping
3.3	Errors in recording	3.6 Technology relevant	skills
	information on	to the enterprise and	
	forms/ documents	the individual's work	
	are identified and	responsibilities	
	acted upon		
3.4	Reporting		
	requirements to		
	supervisor are		
	completed		
	according to		
	organizational		
	guidelines		

VARIABLES	RANGE		
Appropriate	May include:		
sources	1.1. Team members		
	1.2. Supervisor/Department Head		
	1.3. Suppliers		
	1.4. Trade personnel		
	1.5. Local government		
	1.6. Industry bodies		
2. Medium	May include:		
	2.1. Memorandum		
	2.2. Circular		
	2.3. Notice		
	2.4. Information dissemination		
	2.5. Follow-up or verbal instructions		
	2.6. Face-to-face communication		
	2.7. Electronic media (disk files, cyberspace)		
3. Storage	May include:		
	3.1. Manual filing system		
	3.2. Computer-based filing system		
Workplace interactions	May include:		
Intoractions	4.1. Face-to-face		
	4.2. Telephone		
	4.3. Electronic and two-way radio		
	4.4. Written including electronic means, memos, instruction and forms		
	4.5. Non-verbal including gestures, signals, signs and diagrams		
5. Forms	May include:		
	5.1. HR/Personnel forms, telephone message forms, safety reports		

1.	Critical aspects of Competency	Assessment requires evidence that the candidate:		
	Compoterioy	1.1. Prepared written communication following standard format of the organization		
		1.2. Accessed information using workplace communication equipment/systems		
		1.3. Made use of relevant terms as an aid to transfer information effectively		
		Conveyed information effectively adopting formal or informal communication		
2.	Resource	The following resources should be provided:		
	Implications	O.4. Face was altimated		
		2.1. Fax machine		
		2.2. Telephone		
		2.3. Notebook		
		2.4. Writing materials		
		2.5. Computer with Internet connection		
3.	Methods of Assessment	Competency in this unit may be assessed through:		
	Assessment	3.1. Demonstration with oral questioning		
		3.2. Interview		
		3.3. Written test		
		3.4. Third-party report		
4.	Context for	4.1. Competency may be assessed individually in the actual		
	Assessment	workplace or through an accredited institution		

UNIT OF COMPETENCY: WORK IN A TEAM ENVIRONMENT

UNIT CODE : 400311211

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes to identify

roles and responsibilities as a member of a team.

ELEMENTS	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
Describe team role and scope	<ul> <li>1.1 The role and objective of the team is identified from available sources of information</li> <li>1.2 Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources</li> </ul>	<ul><li>1.1 Group structure</li><li>1.2 Group development</li><li>1.3 Sources of information</li></ul>	1.1 Communicating with others, appropriately consistent with the culture of the workplace 1.2 Developing ways in improving work structure and performing respective roles in the group or organization
2. Identify one's role and responsibility within a team	<ul> <li>2.1 Individual roles and responsibilities within the team environment are identified</li> <li>2.2 Roles and objectives of the team is identified from available sources of information</li> <li>2.3 Team parameters, reporting relationships and responsibilities are identified based on team discussions and appropriate external sources</li> </ul>	<ul> <li>2.1 Team roles and objectives</li> <li>2.2 Team structure and parameters</li> <li>2.3 Team development</li> <li>2.4 Sources of information</li> </ul>	2.1 Communicating with others, appropriately consistent with the culture of the workplace 2.2 Developing ways in improving work structure and performing respective roles in the group or organization
3. Work as a team member	3.1 Effective and appropriate forms of communications are	3.1 Communication Process	3.1 Communicating appropriately, consistent with the

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used and interactions undertaken with team members based on company practices.  3.2 Effective and appropriate contributions made to complement team activities and objectives, based on workplace context  3.3 Protocols in reporting are observed based on standard company practices.  3.4 Contribute to the development of team work plans based on an understanding of team's role and objectives	3.2 Workplace communication protocol 3.3 Team planning and decision making 3.4 Team thinking 3.5 Team roles 3.6 Process of team development 3.7 Workplace context	culture of the workplace  3.2 Interacting effectively with others  3.3 Deciding as an individual and as a group using group think strategies and techniques  3.4 Contributing to Resolution of issues and concerns

	VARIABLE	RANGE				
1.	Role and objective of team	May include but not limited to:			May include but not limited to:	
	team	1.1.	Work activities in a team environment with			
		4.0	enterprise or specific sector			
		1.2.	Limited discretion, initiative and judgement maybe demonstrated on the job, either individually or in a			
			team environment			
2.	Sources of information	May ind	clude but not limited to:			
		2.1.	Standard operating and/or other workplace			
			procedures			
		2.2.	Job procedures			
		2.3.	Machine/equipment manufacturer's specifications and instructions			
		2.4.	Organizational or external personnel			
		2.5.	Client/supplier instructions			
		2.6.	Quality standards			
		2.7.	OHS and environmental standards			
3.	Workplace context		clude but not limited to:			
		3.1.	Work procedures and practices			
		3.2.	Conditions of work environments			
		3.3.	Legislation and industrial agreements			
		3.4.	Standard work practice including the storage, safe			
			handling and disposal of chemicals			
		3.5.	Safety, environmental, housekeeping and quality guidelines			

1.	•	Asse	essment requires evidence that the candidate:		
	Competency	1.1	Worked in a team to complete workplace activity		
		1.2	Worked effectively with others		
		1.3	Conveyed information in written or oral form		
		1.4	Selected and used appropriate workplace language		
		1.5	Followed designated work plan for the job		
2.	Resource	The	following resources should be provided:		
	Implications	2.4	Assess to relevent werkeless or engreenistaly simulated		
		2.1	Access to relevant workplace or appropriately simulated		
		2.2	environment where assessment can take place		
<u></u>	NA (I I C	2.2	Materials relevant to the proposed activity or tasks		
3.		Com	competency in this unit may be assessed through:		
	Assessment	3.1	Role play involving the participation of individual member to the attainment of organizational goal		
		3.2	· · · · · · · · · · · · · · · · · · ·		
		3.3	Socio-drama and socio-metric methods		
		3.4	Sensitivity techniques		
		3.5	Written Test		
4.	Context for Assessment	4.1	Competency may be assessed in workplace or in a simulated workplace setting		
		4.2	Assessment shall be observed while task are being undertaken whether individually or in group		

UNIT OF COMPETENCY: SOLVE/ADDRESS GENERAL WORKPLACE

UNIT CODE : 400311212

**UNIT DESCRIPTOR**: This unit covers the knowledge, skills and attitudes required

to apply problem-solving techniques to determine the origin of problems and plan for their resolution. It also includes addressing procedural problems through documentation,

and referral.

ELEMENTS	PERFORMANCE CRITERIA  Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
Identify routine problems	<ul> <li>1.1 Routine problems or procedural problem areas are identified</li> <li>1.2 Problems to be investigated are defined and determined</li> <li>1.3 Current conditions of the problem are identified and documented</li> </ul>	1.1 Current industry hardware and software products and services 1.2 Industry maintenance, service and helpdesk practices, processes and procedures 1.3 Industry standard diagnostic tools 1.4 Malfunctions and resolutions	1.1 Identifying current industry hardware and software products and services 1.2 Identifying current industry maintenance, services and helpdesk practices, processes and procedures. 1.3 Identifying current industry standard diagnostic tools 1.4 Describing common malfunctions and resolutions. 1.5 Determining the root cause of a routine malfunction

2.	Look for solutions to routine problems	2.1	Potential solutions to problem are identified Recommendations about possible solutions are developed, documented, ranked and presented to appropriate person for decision	2.1 Current industry hardware and software products and services 2.2 Industry service and helpdesk practices, processes and procedures 2.3 Operating systems 2.4 Industry standard diagnostic tools 2.5 Malfunctions and resolutions. 2.6 Root cause analysis	2.1 Identifying current industry hardware and software products and services 2.2 Identifying services and helpdesk practices, processes and procedures. 2.3 Identifying operating system 2.4 Identifying current industry standard diagnostic tools 2.5 Describing common malfunctions and resolutions. 2.6 Determining the root cause of a routine malfunction
3.	Recommend solutions to problems	3.1	Implementation of solutions are planned Evaluation of implemented solutions are planned Recommended solutions are documented and submit to appropriate person for confirmation	3.1 Standard procedures 3.2 Documentation produce	3.1 Producing documentation that recommends solutions to problems 3.2 Following established procedures

	VARIABLE	RANGE
Problems/Procedural		May include but not limited to:
	Problem	1.1 Routine/non – routine processes and quality problems
		1.2 Equipment selection, availability and failure
		1.3 Teamwork and work allocation problem
		1.4 Safety and emergency situations and incidents
		1.5 Work-related problems outside of own work area
2.	Appropriate person	May include but not limited to:
		2.1 Supervisor or manager
		2.2 Peers/work colleagues
		2.3 Other members of the organization
3.	Document	May include but not limited to:
		3.1 Electronic mail
		3.2 Briefing notes
		3.3 Written report
		3.4 Evaluation report
4.	Plan	May include but not limited to:
		4.1 Priority requirements
		4.2 Co-ordination and feedback requirements
		4.3 Safety requirements
		4.4 Risk assessment
		4.5 Environmental requirements

Critical aspects of Competency  Assessment requires evidence that the candidate competency  Assessment requires evidence that the candidate competency		Assessment requires evidence that the candidate:
	Competency	<ul> <li>1.1 Determined the root cause of a routine problem</li> <li>1.2 Identified solutions to procedural problems.</li> <li>1.3 Produced documentation that recommends solutions to problems.</li> <li>1.4 Followed established procedures.</li> <li>1.5 Referred unresolved problems to support persons.</li> </ul>
2.	Resource Implications	2.1. Assessment will require access to a workplace over an extended period, or a suitable method of gathering evidence of operating ability over a range of situations.
3.	Methods of Assessment	3.1 Case Formulation 3.2 Life Narrative Inquiry 3.3 Standardized test The unit will be assessed in a holistic manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will occur over a range of situations, which will include disruptions to normal, smooth operation. Simulation may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual workplace and will include walk through of the relevant competency components.
4.	Context for Assessment	4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions.

UNIT OF COMPETENCY: DEVELOP CAREER AND LIFE DECISIONS

UNIT CODE : 400311213

UNIT DESCRIPTOR : This unit covers the knowledge, skills, and attitudes in

managing one's emotions, developing reflective practice, and boosting self-confidence and developing self-regulation.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
Manage one's emotion	1.1 Self-management strategies are identified 1.2 Skills to work independently and to show initiative, to be conscientious, and persevering in the face of setbacks and frustrations are developed 1.3 Techniques for effectively handling negative emotions and unpleasant situation in the workplace are examined	1.1 Self- management strategies that assist in regulating behavior and achieving personal and learning goals (e.g. Nine self- management strategies according to Robert Kelley)  1.2 Enablers and barriers in achieving personal and career goals  1.3 Techniques in handling negative emotions and unpleasant situation in the workplace such as frustration, anger, worry, anxiety, etc.	1.1 Managing properly one's emotions and recognizing situations that cannot be changed and accept them and remain professional  1.2 Developing self-discipline, working independently and showing initiative to achieve personal and career goals  1.3 Showing confidence, and resilience in the face of setbacks and frustrations and other negative emotions and unpleasant situations in the workplace

2.	Develop reflective practice	2.1 Personal strengths and achievements, based on self-assessment strategies and teacher feedback are contemplated  2.2 Progress when seeking and responding to feedback from teachers to assist them in consolidating strengths, addressing weaknesses and fulfilling their potential are monitored  2.3 Outcomes of personal and academic challenges by reflecting on previous problem solving and decision making strategies and feedback from peers and teachers are predicted	2.1 Basic SWOT analysis  2.2 Strategies to improve one's attitude in the workplace  2.3 Gibbs' Reflective Cycle/Model (Description, Feelings, Evaluation, Analysis, Conclusion, and Action plan)	2.1 Using the basic SWOT analysis as self-assessment strategy 2.2 Developing reflective practice through realization of limitations, likes/dislikes; through showing of self-confidence 2.3 Demonstrating self-acceptance and being able to accept challenges
3.	Boost self- confidence and develop self- regulation	3.1 Efforts for continuous self-improvement are demonstrated 3.2 Counter-productive tendencies at work are eliminated 3.3 Positive outlook in life are maintained.	3.1 Four components of self-regulation based on Self- Regulation Theory (SRT) 3.2 Personality development concepts 3.3 Self-help concepts (e. g., 7 Habits by Stephen Covey, transactional analysis, psycho-spiritual concepts)	3.1 Performing effective communication skills – reading, writing, conversing skills  3.2 Showing affective skills – flexibility, adaptability, etc.  3.3 Self-assessment for determining one's strengths and weaknesses

VARIABLE	RANGE	
1. Self-	May include but not limited to:	
management strategies	<ul> <li>1.1 Seeking assistance in the form of job coaching or mentoring</li> <li>1.2 Continuing dialogue to tackle workplace grievances</li> <li>1.3 Collective negotiation/bargaining for better working conditions</li> <li>1.4 Share your goals to improve with a trusted co-worker or supervisor</li> <li>1.5 Make a negativity log of every instance when you catch yourself complaining to others</li> </ul>	
	1.6 Make lists and schedules for necessary activities	
Unpleasant situation	May include but not limited to:	
Situation	2.1 Job burn-out	
	2.2 Drug dependence	
	2.3 Sulking	

Critical aspects of Competency	Assessment requires evidence that the candidate:  1.1 Express emotions appropriately 1.2 Work independently and show initiative 1.3 Consistently demonstrate self-confidence and self-discipline	
2. Resource Implications	The following resources should be provided:  2.1. Access to workplace and resource s  2.2. Case studies	
3. Methods of Assessment	Competency in this unit may be assessed through:  3.1. Demonstration or simulation with oral questioning 3.2. Case problems involving work improvement and sustainability issues 3.3. Third-party report	
Context for     Assessment	4.1. Competency assessment may occur in workplace or any appropriately simulated environment	

UNIT OF COMPETENCY: CONTRIBUTE TO WORKPLACE INNOVATION

UNIT CODE : 400311214

**UNIT DESCRIPTOR**: This unit covers the knowledge, skills and attitudes required to

make a pro-active and positive contribution to workplace

innovation.

ELEMENTS	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1.Identify opportunities to do things better.	<ul> <li>1.1 Opportunities for improvement are identified proactively in own area of work.</li> <li>1.2 Information are gathered and reviewed which may be relevant to ideas and which might assist in gaining support for idea.</li> </ul>	1.1 Roles of individuals in suggesting and making improvements.  1.2 Positive impacts and challenges in innovation.  1.3 Types of changes and responsibility.  1.4 Seven habits of highly effective people.	<ul> <li>1.1 Identifying     opportunities to     improve and to do     things better.     Involvement.</li> <li>1.2 Identifying the positive     impacts and the     challenges of change     and innovation.</li> <li>1.3 Identifying examples of     the types of changes     that are within and     outside own scope of     responsibility</li> </ul>
Discuss and develop ideas with others	2.1 <b>People who could provide input</b> to ideas for improvements are identified.	2.1 Roles of individuals in suggesting and making improvements.	2.1 Identifying opportunities to improve and to do things better. Involvement.
	<ul><li>2.2 Ways of approaching people to begin sharing ideas are selected.</li><li>2.3 Meeting is set with</li></ul>	<ul><li>2.2 Positive impacts and challenges in innovation.</li><li>2.3 Types of changes</li></ul>	<ul><li>2.2 Identifying the positive impacts and the challenges of change and innovation.</li><li>2.3 Providing examples of</li></ul>
	relevant people.  2.4 Ideas for follow up are review and selected based on	and responsibility. 2.4 Seven habits of highly effective people.	the types of changes that are within and outside own scope of responsibility
	feedback. 2.5 <i>Critical inquiry method</i> is used to discuss and develop ideas with others.		2.4 Communicating ideas for change through small group discussions and meetings.
Integrate ideas for change in	3.1 Critical inquiry method is used to integrate different	3.1 Roles of individuals in suggesting and	3.1 Identifying opportunities to improve and to do

VARIABLES	RANGE
Opportunities for	May include:
improvement	1.1 Systems.
	1.2 Processes.
	1.3 Procedures.
	1.4 Protocols.
	1.5 Codes.
	1.6 Practices.
2. Information	May include:
	2.1 Workplace communication problems.
	2.2 Performance evaluation results.
	2.3 Team dynamics issues and concerns.
	2.4 Challenges on return of investment
	2.5 New tools, processes and procedures.
	2.6 New people in the organization.
People who could provide input	May include:
	3.1 Leaders.
	3.2 Managers.
	3.3 Specialists.
	3.4 Associates.
	3.5 Researchers.
	3.6 Supervisors.
	3.7 Staff.
	3.8 Consultants (external)
	3.9 People outside the organization in the same field or
	similar expertise/industry.
4 Critical inquiry mathed	3.10 Clients
4. Critical inquiry method	May include:
	4.1 Preparation.
	4.2 Discussion.
	4.3 Clarification of goals.
	4.4 Negotiate towards a Win-Win outcome.
	4.5 Agreement.
	4.6 Implementation of a course of action.
	4.7 Effective verbal communication. See our pages: Verbal Communication and Effective Speaking.
	4.8 Listening.
	4.9 Reducing misunderstandings is a key part of effective negotiation.
	4.10 Rapport Building.
	4.11 Problem Solving.
	4.12 Decision Making.
	4.13 Assertiveness.
	4.14 Dealing with Difficult Situations.

SEAMER OPERATION LEVEL II

5. Reporting skills	May include:	
	<ul><li>5.1 Data management.</li><li>5.2 Coding.</li><li>5.3 Data analysis and interpretation.</li></ul>	
	5.4 Coherent writing.	
	5.5 Speaking.	

1.	Critical aspects of	Assessment requires evidence that the candidate:	
	Competency	<ul> <li>1.1 Identified opportunities to do things better.</li> <li>1.2 Discussed and developed ideas with others on how to contribute to workplace innovation.</li> <li>1.3 Integrated ideas for change in the workplace.</li> <li>1.4 Analyzed and reported rooms for innovation and learning in the workplace.</li> </ul>	
2.	Resource Implications	The following resources should be provided:  2.1 Pens, papers and writing implements.  2.2 Cartolina.  3.3 Manila papers	
3.	Methods of Assessment	<ul> <li>2.3 Manila papers.</li> <li>Competency in this unit may be assessed through:</li> <li>3.1 Psychological and behavioral Interviews.</li> <li>3.2 Performance Evaluation.</li> <li>3.3 Life Narrative Inquiry.</li> <li>3.4 Review of portfolios of evidence and third-party workplace reports of on-the-job performance.</li> <li>3.5 Sensitivity analysis.</li> <li>3.6 Organizational analysis.</li> <li>3.7 Standardized assessment of character strengths and virtues applied.</li> </ul>	
4.	Context for Assessment	4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions.	

UNIT OF COMPETENCY: PRESENT RELEVANT INFORMATION

UNIT CODE : 400311215

**UNIT DESCRIPTOR**: This unit of covers the knowledge, skills and attitudes

required to present data/information appropriately.

ELEMENTS	PERFORMANCE CRITERIA  Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Gather data/information	<ul> <li>1.1 Evidence, facts and information are collected</li> <li>1.2 Evaluation, terms of reference and conditions are reviewed to determine whether data/information falls within project scope</li> </ul>	<ul> <li>1.1 Organisational protocols</li> <li>1.2 Confidentiality</li> <li>1.3 Accuracy</li> <li>1.4 Business mathematics and statistics</li> <li>1.5 Data analysis techniques/proced ures</li> <li>1.6 Reporting requirements to a range of audiences</li> <li>1.7 Legislation, policy and procedures relating to the conduct of evaluations</li> <li>1.8 Organisational values, ethics and codes of conduct</li> </ul>	<ul> <li>1.1 Describing organisational protocols relating to client liaison</li> <li>1.2 Protecting confidentiality</li> <li>1.3 Describing accuracy</li> <li>1.4 Computing business mathematics and statistics</li> <li>1.5 Describing data analysis techniques/ procedures</li> <li>1.6 Reporting requirements to a range of audiences</li> <li>1.7 Stating legislation, policy and procedures relating to the conduct of evaluations</li> <li>1.8 Stating organisational values, ethics and codes of conduct</li> </ul>

PERFORMANCE CRITERIA			
		REQUIRED	REQUIRED
ELEMENTS  Italicized terms are elaborated in the		KNOWLEDGE	SKILLS
	Range of Variables		
2. Assess gathered data/ information	<ul> <li>2.1 Validity of data/ information is assessed</li> <li>2.2 Analysis techniques are applied to assess data/ information.</li> <li>2.3 Trends and anomalies are identified</li> <li>2.4 Data analysis techniques and procedures are documented</li> <li>2.5 Recommendations are made on areas of possible improvement.</li> </ul>	<ul> <li>2.1 Business mathematics and statistics</li> <li>2.2 Data analysis techniques/ procedures</li> <li>2.3 Reporting requirements to a range of audiences</li> <li>2.4 Legislation, policy and procedures relating to the conduct of evaluations</li> <li>2.5 Organisational values, ethics and codes of conduct</li> </ul>	<ul> <li>2.1 Computing business mathematics and statistics</li> <li>2.2 Describing data analysis techniques/ procedures</li> <li>2.3 Reporting requirements to a range of audiences</li> <li>2.4 Stating legislation, policy and procedures relating to the conduct of evaluations</li> </ul>
3. Record and present information	3.1 Studied data/information are recorded. 3.2 Recommendations are analysed for action to ensure they are compatible with the project's scope and terms of reference. 3.3 Interim and final reports are analysed and outcomes are compared to the criteria established at the outset.	3.1 Data analysis techniques/ procedures 3.2 Reporting requirements to a range of audiences 3.3 Legislation, policy and procedures relating to the conduct of evaluations 3.4 Organisational values, ethics and codes of conduct	2.5 Stating organisational values, ethics and codes of conduct  3.1 Describing data analysis techniques/ procedures  3.2 Reporting requirements to a range of audiences  3.3 Stating legislation, policy and procedures relating to the conduct of evaluations  3.4 Stating organisational values, ethics and
	3.4 Findings are presented to stakeholders.		codes of conduct practices

VARIABLES	RANGE
Data analysis techniques	May include but not limited to:
	1.1. Domain analysis
	1.2. Content analysis
	1.3. Comparison technique

1.	Critical aspects of	Assessment requires evidence that the candidate:
	Competency	1.1 Determine data / information
		1.2 Studied and applied gathered data/information
		1.3 Recorded and studied studied data/information
		These aspects may be best assessed using a range of scenarios
		what ifs as a stimulus with a walk through forming part of the
		response. These assessment activities should include a range of
		problems, including new, unusual and improbable situations that
		may have happened.
2.	Resource	Specific resources for assessment
	Implications	2.1. Evidence of competent performance should be obtained by
		observing an individual in an information management role
		within the workplace or operational or simulated
		environment.
3.	Methods of	Competency in this unit may be assessed through:
	Assessment	3.1. Written Test
		3.2. Interview
		3.3. Portfolio
		The unit will be assessed in a holistic manner as is practical and
		may be integrated with the assessment of other relevant units of
		competency. Assessment will occur over a range of situations,
		which will include disruptions to normal, smooth operation.
		Simulation may be required to allow for timely assessment of
		parts of this unit of competency. Simulation should be based on
		the actual workplace and will include walk through of the relevant
4	Comband for	competency components.
4.	Context for Assessment	4.1. In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.
	Assessment	concurrently with relevant teamwork of operation units.

UNIT OF COMPETENCY: PRACTICE OCCUPATIONAL SAFETY AND HEALTH

**POLICIES AND PROCEDURES** 

UNIT CODE : 400311216

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes

required to identify OSH compliance requirements, prepare OSH requirements for compliance, perform tasks in accordance with relevant OSH policies and

procedures.

ELEMENTS	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
Identify OSH compliance requirements	1.1 Relevant OSH requirements, regulations, policies and procedures are identified in accordance with workplace policies and procedures  1.2 OSH activity non- conformities are conveyed to appropriate personnel  1.3 OSH preventive and control requirements are identified in accordance with OSH work policies and procedures	<ul> <li>1.1. OSH preventive and control requirements</li> <li>1.2. Hierarchy of Controls</li> <li>1.3. Hazard Prevention and Control</li> <li>1.4. General OSH principles</li> <li>1.5. Work standards and procedures</li> <li>1.6. Safe handling procedures of tools, equipment and materials</li> <li>1.7. Standard emergency plan and procedures in the workplace</li> </ul>	<ul> <li>1.1. Communication skills</li> <li>1.2. Interpersonal skills</li> <li>1.3. Critical thinking skills</li> <li>1.4. Observation skills</li> </ul>
Prepare OSH     requirements for     compliance	2.1 OSH work activity material, tools and equipment requirements are identified in accordance with	2.1. Resources necessary to execute hierarchy of controls 2.2. General OSH principles	2.1. Communication skills 2.2. Estimation skills 2.3. Interpersonal skills 2.4. Critical thinking skills

	workplace policies and procedures  2.2. Required OSH materials, tools and equipment are acquired in accordance with workplace policies and procedures  2.3. Required OSH materials, tools and equipment are arranged/ placed in accordance with OSH work standards	2.3. Work standards and procedures  2.4. Safe handling procedures of tools, equipment and materials  2.5. Different OSH control measures	2.5. Observation skills 2.6. Material, tool and equipment identification skills
3. Perform tasks in accordance with relevant OSH policies and procedures	3.1 Relevant OSH work procedures are identified in accordance with workplace policies and procedures 3.2 Work Activities are executed in accordance with OSH work standards 3.3 Non-compliance work activities are reported to appropriate personnel	3.1. OSH work standards 3.2. Industry related work activities 3.3. General OSH principles 3.4. OSH Violations Non-compliance work activities	3.1 Communication skills 3.3 Interpersonal skills 3.4 Troubleshooting skills 3.5 Critical thinking skills 3.6 Observation skills

VARIABLE	RANGE
OSH Requirements,     Regulations, Policies and     Procedures	May include:  1.1 Clean Air Act 1.2 Building code 1.3 National Electrical and Fire Safety Codes 1.4 Waste management statutes and rules 1.5 Permit to Operate 1.6 Philippine Occupational Safety and Health Standards 1.7 Department Order No. 13 (Construction Safety and Health)
Appropriate Personnel	1.8 ECC regulations  May include:
	<ul> <li>2.1 Manager</li> <li>2.2 Safety Officer</li> <li>2.3 EHS Offices</li> <li>2.4 Supervisors</li> <li>2.5 Team Leaders</li> <li>2.6 Administrators</li> <li>2.7 Stakeholders</li> <li>2.8 Government Official</li> <li>2.9 Key Personnel</li> <li>2.10 Specialists</li> <li>2.11 Himself</li> </ul>
3. OSH Preventive and Control Requirements	May include:  3.1 Resources needed for removing hazard effectively 3.2 Resources needed for substitution or replacement 3.3 Resources needed to establishing engineering controls 3.4 Resources needed for enforcing administrative controls 3.5 Personal Protective equipment
4. Non OSH-Compliance Work Activities	

Critical aspects of	Assessment requires evidence that the candidate:
Competency	<ol> <li>1.1. Convey OSH work non-conformities to appropriate personnel</li> <li>1.2. Identify OSH preventive and control requirements in accordance with OSH work policies and procedures</li> <li>1.3. Identify OSH work activity material, tools and equipment requirements in accordance with workplace policies and procedures</li> <li>1.4. Arrange/Place required OSH materials, tools and equipment in accordance with OSH work standards</li> <li>1.5. Execute work activities in accordance with OSH work standards</li> <li>1.6. Report OSH activity non-compliance work activities to appropriate personnel</li> </ol>
2. Resource Implications	The following resources should be provided:
	Facilities, materials tools and equipment necessary for the activity
3. Methods of Assessment	Competency in this unit may be assessed through:
	3.1 Observation/Demonstration with oral questioning
	3.2 Third party report
4. Context for Assessment	4.1 Competency may be assessed in the work place or in a simulated work place setting

UNIT OF COMPETENCY: EXERCISE EFFICIENT AND EFFECTIVE SUSTAINABLE

PRACTICES IN THE WORKPLACE

UNIT CODE : 400311217

UNIT DESCRIPTOR : This unit covers knowledge, skills and attitude to identify the

efficiency and effectiveness of resource utilization, determine causes of inefficiency and/or ineffectiveness of resource utilization and Convey inefficient and ineffective

environmental practices

	PERFORMANCE CRITERIA		
ELEMENTS  Italicized terms are elaborated in the Range of Variables		REQUIRED KNOWLEDGE	REQUIRED SKILLS
Identify the     efficiency and     effectiveness     of resource     utilization	1.1 Required resource utilization in the workplace is measured using appropriate techniques 1.2 Data are recorded in accordance with workplace protocol 1.3 Recorded data are compared to determine the efficiency and effectiveness of resource utilization according to established environmental work procedures	1.1. Importance of Environmental Literacy  1.2. Environmental Work Procedures  1.3. Waste Minimization  1.4. Efficient Energy Consumptions	<ul><li>1.1 Recording Skills</li><li>1.2 Writing Skills</li><li>1.3 Innovation Skills</li></ul>
2. Determine causes of inefficiency and/or ineffectiveness of resource utilization	2.1 Potential causes of inefficiency and/or ineffectiveness are listed  2.2 Causes of inefficiency and/or ineffectiveness are identified through deductive reasoning  2.3 Identified causes of inefficiency and/or ineffectiveness are validated thru established environmental procedures	2.1 Causes of environmental inefficiencies and ineffectiveness	<ul><li>2.1 Deductive Reasoning Skills</li><li>2.2 Critical thinking</li><li>2.3 Problem Solving</li><li>2.4 Observation Skills</li></ul>
3. Convey inefficient and ineffective environmental practices	<ul> <li>3.1 Efficiency and effectiveness of resource utilization are reported to appropriate personnel</li> <li>3.2 Concerns related resource utilization are discussed with appropriate personnel</li> <li>3.3 Feedback on information/concerns raised are clarified with appropriate personnel</li> </ul>	3.1 Appropriate Personnel to address the environmental hazards 3.2 Environmental corrective actions	3.1 Written and Oral Communication Skills 3.2 Critical thinking 3.3 Problem Solving 3.4 Observation Skills

	3.5 Practice
	Environmental
	Awareness

	VARIABLE	RANGE
1.	Environmental Work Procedures	May include:
	Flocedules	1.1 Utilization of Energy, Water, Fuel Procedures
		1.2 Waster Segregation Procedures
		1.3 Waste Disposal and Reuse Procedures
		1.4 Waste Collection Procedures
		1.5 Usage of Hazardous Materials Procedures
		1.6 Chemical Application Procedures
		1.7 Labeling Procedures
2.	Appropriate Personnel	May include:
		2.1 Manager
		2.2 Safety Officer
		2.3 EHS Offices
		2.4 Supervisors
		2.5 Team Leaders
		2.6 Administrators
		2.7 Stakeholders
		2.8 Government Official
		2.9 Key Personnel
		2.10 Specialists
		2.11 Himself

1.		Assessment requires evidence that the candidate:		
	Competency	Measured required resource utilization in the workplace using appropriate techniques		
		1.2. Recorded data in accordance with workplace protocol		
		1.3. Identified causes of inefficiency and/or ineffectiveness through deductive reasoning		
		1.4. Validate the identified causes of inefficiency and/or		
		ineffectiveness thru established environmental procedures		
		<ol> <li>Report efficiency and effectives of resource utilization to appropriate personnel</li> </ol>		
		Clarify feedback on information/concerns raised with appropriate personnel		
2.	Resource Implications	The following resources should be provided:		
		2.1 Workplace		
		<ul><li>2.1 Workplace</li><li>2.2 Tools, materials and equipment relevant to the tasks</li></ul>		
		2.3 PPE		
		2.4 Manuals and references		
		2.4 Manuals and references		
3.	Methods of	Competency in this unit may be assessed through:		
	Assessment	2.4 Damagatastian		
		3.1 Demonstration		
		3.2 Oral questioning		
_	0 1 11	3.3 Written examination		
4.	Context for	4.1 Competency assessment may occur in workplace or any		
	Assessment	appropriately simulated environment		
		4.2 Assessment shall be observed while task are being undertaken		
		whether individually or in-group		

In line with

UNIT OF COMPETENCY: PRACTICE ENTREPRENEURIAL SKILLS IN THE

WORKPLACE

UNIT CODE : 400311218

UNIT DESCRIPTOR : This unit covers the outcomes required to apply

entrepreneurial workplace best practices and implement cost-

effective operations

ELEMENTS	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Apply entrepreneurial workplace best practices	<ul> <li>1.1 Good practices relating to workplace operations are observed and selected following workplace policy.</li> <li>1.2 Quality procedures and practices are complied with according to workplace requirements.</li> <li>1.3 Cost-conscious habits in resource utilization are applied based on industry standards.</li> </ul>	1.1 Workplace best practices, policies and criteria 1.2 Resource utilization 1.3Ways in fostering entrepreneurial attitudes: 1.3.1 Patience 1.3.2 Honesty 1.3.3 Quality-consciousne ss 1.3.4 Safety-consciousne ss 1.3.5 Resourceful ness	1.1 Communicati on skills 1.2 Complying with quality procedures
2. Communicate entrepreneurial workplace best practices	<ul> <li>2.1 Observed good practices relating to workplace operations are communicated to appropriate person.</li> <li>2.2 Observed quality procedures and practices are communicated to appropriate person</li> <li>2.3 Cost-conscious habits in resource utilization are communicated based on industry standards.</li> </ul>	2.1 Workplace best practices, policies and criteria  2.2 Resource utilization  2.3 Ways in fostering entrepreneurial attitudes:  2.3.1 Patience  2.3.2 Honesty  2.3.3 Quality-consciousne ss	2.1 Communication skills 2.2 Complying with quality procedures 2.3 Following workplace communication protocol

Implement cost- effective	3.1 Preservation and optimization of workplace	2.3.4 Safety- consciousne ss 2.3.5 Resourceful ness  3.1 Optimization of workplace	3.1 Implementing preservation
operations	resources is implemented in accordance with enterprise policy  3.2 Judicious use of workplace tools, equipment and materials are observed according to manual and work requirements.  3.3 Constructive contributions to office operations are made according to enterprise requirements.  3.4 Ability to work within one's allotted time and finances is sustained.	resources 3.2 5S procedures and concepts 3.3 Criteria for costeffectiveness 3.4 Workplace productivity 3.5 Impact of entrepreneurial mindset to workplace productivity 3.6 Ways in fostering entrepreneurial attitudes: 4. Quality-consciousness 5. Safety-consciousness	and optimizing workplace resources 3.2 Observing judicious use of workplace tools, equipment and materials 3.3 Making constructive contributions to office operations 3.4 Sustaining ability to work within allotted time and finances

VARIABLE	RANGE
1.Good practices	May include:
	1.1 Economy in use of resources
	1.2 Documentation of quality practices
2.Resources utilization	May include:
	2.1 Consumption/ use of consumables
	2.2 Use/Maintenance of assigned equipment and furniture
	2.3 Optimum use of allotted /available time

1. Critical aspects of	Assessment requires evidence that the candidate:		
competency	1.1 Demonstrated ability to identify and sustain cost-effective activities in the workplace		
	1.2 Demonstrated ability to practice entrepreneurial knowledge, skills and attitudes in the workplace.		
2. Resource Implications	The following resources should be provided:		
	2.1 Simulated or actual workplace		
	2.2 Tools, materials and supplies needed to demonstrate the required tasks		
	2.3 References and manuals		
	2.3.1 Enterprise procedures manuals		
	2.3.2 Company quality policy		
3. Methods of	Competency in this unit should be assessed through:		
Assessment	3.1 Interview		
	3.2 Third-party report		
4.Context of Assessment	4.1 Competency may be assessed in workplace or in a simulated workplace setting		
	4.2 Assessment shall be observed while tasks are being undertaken whether individually or in-group		

#### **COMMON COMPETENCIES**

UNIT OF COMPETENCY: APPLY FOOD SAFETY AND SANITATION

UNIT CODE : PFB751210

UNIT DESCRIPTOR : This unit covers skills and attitude required to apply food

safety and sanitation in the workplace

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Wear Personal Protective Equipment	1.1 Personal protective equipment are checked according to manufacturer's specifications  1.2 Personal protective equipment are worn according to the job requirement	1.1 Personal protective equipment (PPE) 1.2 Procedures in wearing in PPE 1.3 Good Food Manufacturing Practices 1.4 Parts and functions of personal protective equipment	1.1 Checking PPE 1.2 Practicing GMP
2. Observe Personal Hygiene and Good Grooming	2.1 Personal hygiene and good grooming is practiced in line with workplace health and safety requirements	2.1 Good grooming and personal hygiene 2.2 Workplace health and safety requirements	2.1 Practicing good grooming and personal hygiene practices
3. Implement Food Sanitation Practices	3.1 Sanitary food handling practices are implemented in line with workplace sanitation regulations 3.2 Safety measures are observed in line with workplace safety practices.	<ul> <li>3.1 Proper waste disposal</li> <li>3.2 Environmental protection and concerns</li> <li>3.3 Food safety principles and practices</li> <li>3.4 TQM and other food quality system principles</li> </ul>	3.1 Managing wastes 3.2 Implementing sanitary food handling practices 3.3 Practicing workplace safety

4. Render Safety Measures and First Aid Procedures	4.1	applied according to workplace rules and regulations  First aid procedures are applied and coordinated with concerned personnel according to workplace standard operating procedures.	4.3	procedures Parts and functions of personal protective equipment First Aid Kit	<ul><li>4.2</li><li>4.3</li></ul>	Applying safety measures Applying first aid treatment Practicing PPE Coordinating with concerned personnel
5. Implement housekeepin g activities	5.1	surroundings are cleaned in accordance with workplace health and	5.2 5.3	Hazards in work area Waste disposal Housekeeping / 7's Proper waste disposal	5.2	Implementing housekeeping activities Practicing proper waste disposal Coordination skills

	VARIABLE	RANGE
1.	Manufacturer's Specifications	Manufacturer's specifications may include but not limited to:  1.1 Handling 1.2 Operating 1.3 Discharge Label 1.4 Reporting 1.5 Testing 1.6 Positioning 1.7 Refilling
2.	Personal Protective Equipment	Personal Protective Equipment may include but not limited to:  2.1 Apron/laboratory gown  2.2 Mouth masks  2.3 Gloves  2.4 Rubber boots/safety shoes  2.5 Head gears such as caps, hair nets, earl plug
3.	Workplace Health and Safety Requirements	Workplace and Safety Requirements may include: 3.1 Health/Medical Certificate 3.2 DOLE requirements 3.3 BFAD requirements 3.4 Personal Hygiene and good grooming 3.5 Plant Sanitation and waste management
4.	Safety Measures	Safety measures may include but not limited to: 4.1 Labeling of chemicals and other sanitizing agents 4.2 Installation of firefighting equipment in the work area 4.3 Installation of safety signage and symbols 4.4 Implementation of 5S in the work area 4.5 Removal of combustible material in the work area
5.	First Aid Procedures	First Aid Procedures may include but not limited to: 5.1 Mouth to mouth resuscitation 5.2 CPR 5.3 Application of tourniquet 5.4 Applying pressure to bleeding wounds or cuts 5.5 First aid treatment for burned victims
6.	Hazards	Hazards in the workplace may include but not limited to: 6.1 Physical 6.2 Biological 6.3 Chemical

1.	Critical aspects of competency	Assessment requires evidence that the candidate:  1.1 Cleaned, checked and sanitized personal protective equipment 1.2 Practiced proper personal hygiene and good grooming 1.3 Implemented workplace food safety practices 1.4 Applied first aid measures to victims 1.5 Implemented good housekeeping activities in the work area
2.	Resource implications	The following resources MUST be provided: 2.1 Work area/station 2.2 First Aid kit 2.3 PPE relevant to the activities 2.4 Fire extinguisher 2.5 Stretcher 2.6 Materials, tools and equipment relevant to the unit of competency
3.	Method of assessment	Competency may be assessed through: 3.1 A combination of direct observation and questioning of a candidate processing foods.
4.	Context of assessment	4.1 Assessment should occur on the job or in a simulated workplace

UNIT OF COMPETENCY: USE STANDARD MEASURING DEVICES AND INSTRUMENTS

UNIT CODE : PFB751211

UNIT DESCRIPTOR : This unit covers skills and attitude required to use standard

measuring devices, instruments in the workplace.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
Identify     Standard     Measuring     Devices and     Instruments	<ul> <li>1.1 Standard measuring devices and instruments are identified according to manufacturer's specifications</li> <li>1.2 Devices and instruments for measuring are properly checked, sanitized and calibrated prior to use</li> </ul>	<ul> <li>1.1 Safe handling of measuring devices and instruments</li> <li>1.2 Specifications and functions of measuring devices and instruments</li> <li>1.3 Defects and breakages of measuring devices and instruments</li> <li>1.4 Procedures in sanitizing and calibrating and stowing equipment and instruments</li> </ul>	1.1 Communication skills 1.2 Sanitary handling of devices and instruments 1.3 Calibrating skills
2. Review the Procedures in Using Standard Measuring Devices and Instruments	2.1 Procedures in using the standard measuring devices and instruments are recalled according to manufacturer's specifications 2.2 Printed procedures/ brochures/ catalogues are consulted according to specified food processing methods	2.1 Procedures in using different standard measuring devices  2.2 Different food processing methods	2.1 Reading and following printed manuals and brochures 2.2 Using standard measuring devices

3. Follow Procedures of Using Measuring Devices and Instruments  3.1 Methods/practices of using measuring devices and instrum are strictly observed according to manufacturer's specifications and workplace requirem 3.2 Measuring devices a instruments are clear wiped dry and stower after use to ensure conformity with workplace requirem	instruments 3.2 Procedures in cleaning, and stowing equipment and instruments and instruments 3.2 Cleaning and stowing measuring devices and instruments
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VARIABLE	RANGE
Standard Measuring     Devices	Standard Measuring Devices may include but not limited to the following:  1.1 Weighing scales and balances of various capacities and sensitivities  1.2 Measuring cups of varying capacities for dry ingredients  1.3 Measuring cups of varying capacities for liquid ingredients
Standard Measuring Instruments	Standard Measuring Instruments may include but not limited to the following:  2.1 Salinometer  2.2 Thermometers of varying temperature range (0-300 C)  2.3 Refractometer of varying range (0 – 90 B)  2.4 Glasswares like cylinders, beakers, flasks) of varying graduations
3. Food Processing Methods	Food Processing Methods include the following: 3.1 Process foods by Salting, Curing and Smoking 3.2 Process foods by Fermentation and Pickling 3.3 Process foods by Canning and Bottling 3.4 Process foods by Sugar Concentration 3.5 Process foods by Drying and Dehydration

Critical aspects of competency	Assessment requires evidence that the candidate:  1.1 Identified, prepared and calibrated standard measuring devices and instruments  1.2 Followed correctly the procedures in using standard measuring devices and instruments  1.3 Followed proper cleaning and sanitizing and stowing procedures of measuring devices and equipment before and after use
Resource implications	The following resources MUST be provided: 2.1 Work area/station 2.2 Materials, tools and equipment relevant to the Unit of Competency
Method of assessment	Competency may be assessed through:  3.1 Direct observation and questioning of a candidate using measuring devices and instruments
Context of assessment	4.1 Assessment should occur on the job or in a simulated workplace

UNIT OF COMPETENCY: USE FOOD PROCESSING TOOLS, EQUIPMENT AND

**UTENSILS** 

UNIT CODE : PFB751212

UNIT DESCRIPTOR : This unit covers skills and attitude required to operate food

processing tools, equipment and instruments in the

workplace.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
Perform pre- operation activities	<ul> <li>1.1 Appropriate tools and equipment/utensils are assembled according to food processing method</li> <li>1.2 Food processing tools and equipment/utensils are inspected and checked according to manufacturer's specifications</li> <li>1.3 Food processing equipment is set up, adjusted and readied according to job requirements</li> </ul>	<ul> <li>1.1 Procedures in assembling equipment/utens ils</li> <li>1.2 Methods in inspecting food processing tools and equipment / utensils</li> <li>1.3 Procedures in setting-up and adjusting equipment</li> <li>1.4 Equipment, tools and instruments: Parts and Functions</li> <li>1.5 Written and oral communication</li> <li>1.6 Interpreting manufacturer's specifications</li> <li>1.7 Following manufacturer's manual</li> </ul>	1.1 Assembling equipment/ utensils 1.2 Inspecting and checking condition of equipment/ machines 1.3 Setting-up and adjusting food processing equipment 1.4 Reporting equipment/ machine, tools, instruments breakdown and recording same in standard forms 1.5 Communication skills

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Operate food processing equipment	<ul> <li>2.1 Food processing equipment is switched on according to <i>manufacturer's specifications</i></li> <li>2.2 Performance of food processing equipment is checked to ensure conformity with specified output</li> <li>2.3 Operation of food processing equipment is managed to achieve planned outcomes</li> <li>2.4 Minor trouble shooting on food processing tools, equipment and utensils is performed when necessary</li> </ul>	2.1 Procedures on operating food processing equipment 2.2 Inspection of equipment with conformity with required output 2.3 Equipment/ machine wear and tear process 2.4 Minor trouble shooting of food processing tools, equipment and utensils 2.5 Following manufacturer's manual 2.6 PPE 2.7 OSHS	<ul> <li>2.1 Inspecting and checking condition of equipment/ machines</li> <li>2.2 Performing minor troubleshooting</li> </ul>

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Perform post-operation activities	3.1 Food processing equipment is switched off and unplugged after operation in accordance with manufacturer's specifications 3.2 Food processing tools, equipment and instruments are cleaned, sanitized and stowed as required according to manufacturer's specifications and workplace policies and regulations 3.3 Minor preventive maintenance on equipment is performed in line with organization's maintenance system 3.4 Main machine parts are inspected and checked in line with organization's policy 3.5 Condition of machine is monitored to ensure serviceability in accordance with workplace rules and regulations	3.1 Procedures of shutting down food processing equipment 3.2 Inspection machine main parts 3.3 Main machine parts 3.4 Minor preventive maintenance 3.5 Monitoring procedures for condition of machine 3.6 Monitoring checklist 3.7 PPE 3.8 OSHS 3.9 Environmental rules and regulations 3.10 Sanitizing agents: Uses and Specification 3.11 Proper cleaning and stowing of tools and equipment/instruments	<ul> <li>3.1 Shutting down food processing equipment</li> <li>3.2 Sanitizing, cleaning and stowing measuring devices and instruments</li> <li>3.3 Checking main machine parts</li> <li>3.4 Performing minor preventive maintenance</li> <li>3.5 Monitoring machine condition</li> <li>3.6 Accomplishing monitoring checklist</li> <li>3.7 Wearing PPE</li> <li>3.8 Applying OSHS</li> <li>3.9 Performing regular maintenance</li> </ul>

VARIABLES	RANGE
Food processing methods	Food Processing Methods include:  1.1 Salting 1.2 Curing 1.3 Smoking 1.4 Fermentation 1.5 Pickling 1.6 Canning 1.7 Bottling 1.8 Sugar concentration 1.9 Drying 1.10 Dehydration
Food processing tools, equipment and utensils	Tools, equipment and utensils may include but not limited to:  2.1 Tools  Cutting implements such as: Knives Slicer Vegetable cutter Peeler Measuring spoons and cups Scalers Wire basket Blow torch steam jacketed kettle lifter Exhaust box Cooking tools like: Syringe and needle Saucepans Non-stick pan Containers for Fermentation large stoneware crocks food-grade plastic containers large glass jars a heavy plate or glass lid that fits down inside the container  Cold storage equipment like: refrigerators Freezer
	<ul><li>Chiller</li><li>Smoke house</li><li>Oven</li><li>Pressure cooker</li></ul>

VARIABLES	RANGE	
	<ul> <li>Food processor</li> </ul>	Plastic protect cap sealer
	<ul> <li>Sealers (can &amp; plastic)</li> </ul>	<ul><li>wheelers</li></ul>
	<ul><li>Jack lifts</li></ul>	<ul> <li>Stove/burner</li> </ul>
	<ul> <li>Soaking vat</li> </ul>	<ul> <li>Tumbler</li> </ul>
	<ul> <li>Meat grinder/chopper</li> </ul>	<ul> <li>Octo clam</li> </ul>
	<ul> <li>Meat slicer</li> </ul>	<ul> <li>Trolleys</li> </ul>
	<ul> <li>Sausage stuffer</li> </ul>	<ul> <li>Impulse sealer</li> </ul>
	<ul> <li>Vacuum packaging machine</li> </ul>	o blanching machine
	<ul> <li>Machine sealer</li> </ul>	<ul> <li>Fermentation vat</li> </ul>
	<ul> <li>Soaking container</li> </ul>	<ul> <li>Sterilizer mixer</li> </ul>
	<ul><li>Grinder</li></ul>	
	<ul> <li>Enamel kettle/vat</li> </ul>	
	2.3 Apparatus/Instruments	
	<ul> <li>Salinometer</li> </ul>	<ul> <li>Polyscalers</li> </ul>
	<ul> <li>Weighing scales of varying ca</li> </ul>	pacities & sensitivities
	<ul> <li>Refractometer</li> </ul>	<ul> <li>Jelly thermometer</li> </ul>
	<ul><li>Politer</li></ul>	<ul> <li>Candy thermometer</li> </ul>
	2.4 Utensils	
	<ul><li>Kitchen utensils like:</li></ul>	
	<ul> <li>Casserole</li> </ul>	<ul> <li>Chopping boards</li> </ul>
	<ul> <li>Colanders</li> </ul>	<ul> <li>Mixing bowls</li> </ul>
	<ul><li>Food tongs</li></ul>	<ul> <li>Spoon ladder</li> </ul>
	<ul> <li>Wooden ladle</li> </ul>	<ul> <li>Wooden spoon</li> </ul>
	<ul><li>Bowls made from:</li></ul>	
	<ul><li>Stoneware</li></ul>	<ul><li>Glass</li></ul>
	o Aluminum	<ul> <li>Stainless steel</li> </ul>
	<ul> <li>Unchipped enamelware.</li> </ul>	
	o Funnel	<ul><li>Strainer</li></ul>
	o Strainers	<ul> <li>Exhauster</li> </ul>
	Juice extractor	Steamer     Serting trov
	Basting spoons paddle     Smalking trave	Sorting tray
	Smoking trays	<ul> <li>Utility trays</li> </ul>
	<ul><li>Food tray</li></ul>	
3. Manufacturer's specifications	Manufacturer's specifications m	ay include but not
	3.1 Handling requirements	
	3.2 Operating requirements	
	3.3 Discharge Label	
	3.4 Reporting	
	3.5 Testing	
	3.6 Positioning	
	3.7 Refilling	
	<u> </u>	

VARIABLES	RANGE
4. Minor preventive machine	Minor Preventive Machine Maintenance may include but
maintenance	not limited to checking of the following:
	4.1 Machine temperature
	4.2 Hydraulic fluid
	4.3 Wear and surface condition
	4.4 Crack
	4.5 Leak detection
	4.6 Vibration
	4.7 Corrosion/erosion
	4.8 Electric insulation
5. Condition of machine	5.1 Serviceable
	5.2 Repairable
	5.3 Defective

Critical Aspects of Competency	Assessment requires evidence that the candidate:
	<ul> <li>1.1 Assembled, inspected, checked and sanitized appropriate tools and equipment/instruments</li> <li>1.2 Set-up, adjusted and readied tools and equipment and instruments according to requirements</li> <li>1.3 Operated and monitored performance of equipment to ensure specified output</li> <li>1.4 Performed post operation activities</li> <li>1.5 Performed minor trouble shooting on food processing tools, equipment and utensils</li> </ul>
2. Methods of Assessment	Competency in this unit must be assessed
	through:
	<ul> <li>2.1 Direct observation and questioning of a candidate operating food processing tools and equipment/instruments</li> <li>2.2 Submission of written report on the performance and condition of equipment/machine, tools, instruments used.</li> </ul>
3. Resource Implications	The following resources must be provided:
	<ul><li>3.1 Work area/station</li><li>3.2 Materials, tools and equipment relevant to the Unit of Competency</li></ul>
4. Context of Assessment	4.1 Assessment should occur on the job or in a simulated workplace

UNIT OF COMPETENCY: PERFORM MATHEMATICAL COMPUTATIONS

UNIT CODE : PFB751213

**UNIT DESCRIPTOR** : This unit covers the knowledge, skills and attitude to perform mathematical computations in the workplace.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS	
Gather and tabulate the recorded data	<ul> <li>1.1 Records of weights and measurements of raw materials and ingredients are gathered and summarized according to workplace standard operating procedures</li> <li>1.2 Records of weights and measurements of finished processed products are gathered and summarized according to workplace standard operating procedures</li> <li>1.3 Summarized data are tabulated according to enterprise requirements</li> </ul>	<ul> <li>1.1 Data gathering</li> <li>1.2 Record keeping</li> <li>1.3 Data summary and analysis</li> <li>1.4 Basic Mathematical Operations</li> </ul>	<ul> <li>1.1 Gathering data</li> <li>1.2 Keeping of records</li> <li>1.3 Summarizing and analyzing data</li> <li>1.4 Basic Mathematical skills</li> <li>1.5 Basic Accounting skills</li> </ul>	
2. Review the various formulations	<ul> <li>2.1 Raw materials and ingredients and percentage formulations are checked/counter checked according to approved specifications and enterprise requirements</li> <li>2.2 Finished products and percentage formulations are reviewed according to approved specifications</li> </ul>	2.1 Percentages and formulations of raw materials and ingredient and finished products 2.2 Procedures in checking raw materials and finished products formulation and percentages	2.1 Checking percentages formulations of raw materials and ingredient 2.2 Reviewing percentages and formulations of finished products 2.3 Numeracy skills	

PERFORMANCE CRITERIA  ELEMENT Italicized terms are elaborated in the Range of Variables		REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Calculate production input and output  4. Compute production cost	I -	2.3 Basic Mathematical Operations  3.1 Record keeping 3.2 Mensuration 3.3 Fraction, ratios and proportions 3.4 Basic Mathematical Operations 3.5 Conversion factors 3.6 Percentage formulation  4.1 Cost of production 4.2 Validation procedures for computer costs	3.1 Basic Mathematical skills 3.2 Recording skills  4.1 Basic Mathematical skills  4.2 Basic Accounting skills  4.3 Reviewing and
	4.2 Computed costs of production are reviewed and validated according to organization's production requirements	4.3 Basic Mathematical Operations	validating computed costs

VARIABLES	RANGE
Weights and measurements	Weights and measurements may include:
	1.1 Gravimetric
	1.2 Volumetric
	1.3 Lengths, diameters, widths
	1.4 Seam measurements
	1.5 Hotness/coldness (temperature)
	1.6 Concentrations of solutions
2. Costs of production	Costs of production are computed using the following:
	2.1 Ingredient formulation
	2.2 Percentage formulation
	2.3 Conversion
	2.4 Ratios and proportion
	2.5 Spoilage and rejects and corresponding
	percentages
	2.6 Recoveries and yields and corresponding
	percentages

Critical Aspects of Competency	Assessment requires evidence that the candidate:
	<ul> <li>1.1 Gathered the records of weights and measurements of raw materials/ingredients and finished processed products</li> <li>1.2 Summarized and tabulated all raw data gathered</li> <li>1.3 Calculated the production inputs and outputs</li> <li>1.4 Computed the costs of production</li> <li>1.5 Reviewed all formulations and concentrations of solutions according to specifications and standards of the enterprise</li> </ul>
2. Methods of Assessment	Competency in this unit must be assessed through:     1.1 A combination of direct observation and questioning of a candidate computing costs of production     2.2 Submission of a written report showing a record of production data including raw data
3. Resource Implications	The following resources should be provided: 3.1 Work area/station 3.2 Materials relevant to recording and documentation of production data 3.3 Computer with printer and software 3.4 Calculator 3.5 Work table
Context of Assessment	4.1 Assessment should occur on the job or in a simulated workplace

UNIT OF COMPETENCY **IMPLEMENT GOOD MANUFACTURING** 

PRACTICE AND PROCEDURES

**UNIT CODE** PFB751214

This unit covers the knowledge, skills and attitudes **UNIT DESCRIPTOR** 

required to comply with relevant Good
Manufacturing Practice (GMP) codes through the
implementation of workplace GMP and quality

procedures

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1.Identify requirements of GMP related to own work	1.1 Sources of information on GMP requirements are located 1.2 GMP requirements and responsibilities related to own work are identified	<ul> <li>1.1 GMP Requirements</li> <li>1.2 GMP Codes of practice, policies and procedures</li> <li>1.3 GMP Role of internal and external auditors</li> <li>1.4 Contamination events and performance improvement processes procedures</li> <li>1.5 Personal clothing and footwear requirements at work areas</li> <li>1.6 Use of personal clothing, storage and disposal requirements</li> <li>1.7 Micro biological, physical and chemical contaminants</li> <li>1.8 Basic concepts of quality assurance</li> <li>1.9 Control methods and procedures used in GMP</li> </ul>	<ul> <li>1.1 Planning and organizing work (time management)</li> <li>1.2 Working with others and in teams</li> <li>1.3 Practicing GMP</li> <li>1.4 Following contamination investigation procedures</li> </ul>

		1.10 GMP
		1.10 GMP responsibilities and requirements relating to work role 1.11 Basic properties, handling and storage requirements of raw materials, packaging components and final product 1.12 Standards for materials, equipment and utensils used in the work area 1.13 Recall and traceability procedures relevant to work role 1.14 Procedures for identifying or isolating materials or product of unacceptable quality 1.15 Record keeping and the recording
Observe personal     business and conduct	2.1 Personal hygiene	requirements of GMP.  2.1 Workplace entry 2.1 Following
hygiene and conduct to meet GMP requirements	meets GMP requirements  2.2 Clothing is prepared, used, stored and disposed of according to GMP and workplace procedures	and exit procedures 2.2 Personal hygiene 2.3 PPE  workplace entry and exit procedures 2.2 Practicing OSHS 2.3 Practicing GMP
	2.3 Personal movement around the workplace complies with area entry and exit procedures	

	1.1.		
3.Implement GMP requirements when carrying out work activities	3.1 GMP requirements are identified 3.2 Work area, materials, equipment and product are routinely monitored to ensure compliance with GMP requirements 3.3 Raw materials, packaging components and product are handled according to GMP and workplace procedures 3.4 Workplace procedures 3.4 Workplace procedures to control resource allocation and process are followed to meet GMP requirements 3.5 Common forms of contamination are identified and appropriate control measures are followed according to GMP requirements 3.6 The workplace is maintained in a clean and tidy order to meet GMP housekeeping standard	3.1 Monitoring methods of work area, materials and equipment 3.2 Handling of raw materials, packaging components and product 3.3 Control resource allocation and processes in the workplace 3.4 Contaminants 3.5 Good Manufacturing Practices (GMP)	3.1 Identifying GMP requirements 3.2 Monitoring routinely of work area, materials equipment and product 3.3 Handling of raw materials, packaging components and product 3.4 Maintaining cleanliness in the workplace
4.Participate in improving GMP	4.1 Processes, practices or conditions which could result in non-compliance with GMP are identified and reported according to workplace reporting requirements	4.1 Non-compliance and corrective action in GMP 4.2 Corrective actions	<ul> <li>4.1 Practicing GMP</li> <li>4.2 Reporting workplace condition</li> <li>4.3 Implementing corrective measures</li> </ul>

	4.2 Corrective action is implemented within level of responsibility 4.3 GMP issues are raised with designated personnel		
5.Participate in validation processes	<ul> <li>5.1 Validation procedures are followed to GMP requirements</li> <li>5.2 Issues arising from validation are raised with designated personnel</li> <li>5.3 Validation procedures are documented to meet GMP requirements</li> </ul>	<ul> <li>5.1 Validation     procedures in     GMP</li> <li>5.2 Issues arising     from validation</li> <li>5.3 Documentation of     validation     procedures</li> </ul>	5.1 Following validation procedures 5.2 Reporting issues arising from validation 5.3 Documenting validation procedures

	VARIABLES		RANGE
1.	OH&S requirements may include:	1.1. 1.2.	OH&S legal requirements Enterprise OH&S policies, procedures and programs
2.	Work in carried out in accordance with regulations. Regulatory requirements may include:	2.1. 2.2. 2.3.	Relevant regulations regarding food processing and food safety regulations Department of Health – Food Establishments – Code of Sanitation of the Philippines (P.D.856) Environment Management Bureau regulations regarding emissions, waste treatment, noise and effluent treatment and control
3.	Hygiene and sanitation requirements may include:	3.1. 3.2. 3.3.	Department of Health – Food Establishments – Code of Sanitation of the Philippines (P.D.856) Requirements set out by Bureau of Food and Drugs Workplace requirements
4.	Workplace requirements may include:	4.1. 4.2. 4.3. 4.4. 4.5. 4.6. 4.7.	Work instructions Standard operating procedures OH&S requirements Quality assurance requirements Equipment manufacturers' advice Material Safety Data Sheets Codes of Practice and related advice
5.	Products may include	5.1.	Products, raw materials, packaging components and consumables, part-processed product, finished product and cleaning materials
6.	Responsibility and reporting systems	6.1. 6.2.	Responsibility for applying Good Manufacturing Practice relates to the person's work area Reporting systems may include electronic and manual data recording and storage systems

1 Critical canada	o of Asso	ssment requires evidences that the candidate:
Critical aspect		Located and followed workplace information relating to GMP
Competency	1.1	·
	4.0	responsibilities
	1.2	Maintained personal hygiene consistent with GMP
	1.3	Followed workplace procedures when moving around the
		workplace and/or from one task to another to maintain GMP
	1.4	Used, stored and disposed of appropriate clothing/footwear
		as required by work tasks and consistent with GMP
	1.5	Identified and reported situations that do or could
		compromise GMP
	1.6	Applied appropriate control measures to control
		contamination
	1.7	Recorded results of monitoring, and maintain records as
		required by GMP
	1.8	Followed validation procedures within level of responsibility
	1.9	Identified and responded to out-of-specification or
		unacceptable raw materials, packaging components, final or
		part processed product within level of responsibility
	1.10	Followed procedures to isolate or quarantine non-conforming
		product
	1 11	Handled, cleaned and stored equipment, utensils, raw
	''''	materials, packaging components and related items
		according to GMP and workplace procedures
	1 12	Maintained GMP for own work
		Handled and/or disposed of out-of-specification or
	1.13	contaminated materials, packaging components/consumables
		and product, waste and recyclable material according to GMP
	1 1 1	as required by work responsibilities
		Maintained the work area in a clean and tidy state
	1.15	Identified and reported signs of pest infestation
2. Resource	The f	following resources should be provided:
Implication		Workplace location and access to workplace policies
p.iioatioi	2.2	Materials relevant to the proposed activity and tasks
	2.2	iviaterials relevant to the proposed activity and tasks
3. Methods o	of Com	petency in this unit must be assessed using at least two
Assessme		the following methods:
, 1000001110	3.1	A combination of direct observation and oral
	3.1	questioning
	2.0	
	3.2	Written report
	3.3	Written Test Portfolio
4. Context of	ASSA I	ssment should occur on the job or in a simulated workplace
Assessme	nt A336	content offolia occar of the job of the simulated workplace

UNIT OF COMPETENCY : IMPLEMENT ENVIRONMENTAL POLICIES AND

**PROCEDURES** 

UNIT CODE : PFB751215

**UNIT DESCRIPTOR** : This unit covers skills and attitude required to implement

environmental policies and procedures when carrying out

work responsibilities

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Conduct work in accordance with environmental policies and procedures  1. Conduct work in accordance with environmental policies and procedures  1. Conduct work in accordance with environmental policies and procedures	<ul> <li>1.1. Immediate work area is routinely checked to ensure compliance with environmental requirements</li> <li>1.2. Hazards and unacceptable performance are identified, removed and/or reported to appropriate personnel according to workplace procedures</li> <li>1.3. Workplace procedures and work instructions are followed</li> <li>1.4. Where control requirements are not met, incidents are promptly reported and corrective action is taken</li> <li>1.5. Measures used to minimize and handle waste are followed</li> <li>1.6. Environmental data is recorded in required format according to workplace reporting requirements</li> </ul>	<ul> <li>1.1 Workplace approach to managing environmental issues</li> <li>1.2 Responsibilities of self and employer to manage environmental issues on site</li> <li>1.3 Sources of advice on environmental issues in the workplace</li> <li>1.4 Environmental hazards and risks associated with the work</li> <li>1.5 Work procedures as they relate to environmental responsibilities</li> <li>1.6 Procedures used to prevent or control environmental risks associated with own work</li> <li>1.7 Basic concepts of hazard identification, risk assessment and control options</li> <li>1.8 Identifying and responding to hazards</li> <li>1.9 Impact of work practices on resource utilization and wastage</li> </ul>	<ul> <li>1.1 Planning and organizing work (time management)</li> <li>1.2 Working with others and in teams</li> <li>1.3 Practicing environmental skills environmental skills</li> </ul>

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		<ul> <li>1.10 Procedures used to handle and dispose of waste</li> <li>1.11 The difference between trade waste and storm water drains</li> <li>1.12 Consequences of inappropriate waste handling and disposal</li> <li>1.13 Procedures for responding to unplanned incidents such as spills and leaks</li> <li>1.14 Emergency response system and procedures</li> <li>1.15 Responsible use of resources in own work area</li> <li>1.16 Reporting procedures and responsibilities</li> <li>1.17 Consultative processes in the workplace for raising issues/ suggestions on environmental issues.</li> </ul>	
2. Participate in improving environmental practices at work	2.1 Processes or conditions which could result in an unacceptable environmental outcome are identified and reported according to workplace reporting requirements.  2.2 Corrective action is taken in accordance with the environmental management and emergency	2.1 Unacceptable environmental outcomes 2.2 Corrective action 2.3 Emergency response plan 2.4 Improvement in environmental practices 2.5 Report preparation	<ul> <li>2.1 Identifying and reporting unacceptable environmental outcomes</li> <li>2.2 Implementing corrective actions</li> <li>2.3 Participating in improvement of environmental practices</li> <li>2.4 Practicing written communication skills</li> </ul>

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	response plans as required.  2.3 Contributions are made to participative arrangements for managing environmental issues in the workplace within workplace procedures and level of responsibility.		
3. Respond to an environmental emergency	3.1 Emergency situations are identified and reported according to workplace reporting requirements 3.2 Emergency procedures are followed as appropriate to the nature of the emergency and according to workplace procedures	3.1 Emergency situations 3.2 Emergency procedures	<ul> <li>3.1 Identifying emergency situations</li> <li>3.2 Following emergency procedures</li> <li>3.3 Practicing written communication skills</li> </ul>

VARIABLE	RANGE
OH&S requirements may include:	1.1. OH&S legal requirements     1.2. Enterprise OH&S policies, procedures and programs
Work in carried out in accordance with regulations. Regulatory requirements may include.	<ul> <li>2.1. Relevant regulations regarding food processing and food safety regulations</li> <li>2.2. Department of Health – Food Establishments – Code of Sanitation of the Philippines (P.D.856)</li> <li>2.3. Environment Management Bureau regulations regarding emissions, waste treatment, noise and effluent treatment and control</li> </ul>
Hygiene and sanitation requirements may include:	<ul> <li>3.1. Department of Health – Food Establishments – Code of Sanitation of the Philippines (P.D.856)</li> <li>3.2. Requirements set out by Bureau of Food and Drugs</li> <li>3.3. Workplace requirements</li> </ul>
Workplace requirements may include:	<ul> <li>4.1. Work instructions</li> <li>4.2. Standard operating procedures</li> <li>4.3. OH&amp;S requirements</li> <li>4.4. Quality assurance requirements</li> <li>4.5. Equipment manufacturers' advice</li> <li>4.6. Material Safety Data Sheets</li> <li>4.7. Codes of Practice and related advice</li> </ul>

- 5. Identification and control of hazards may include:
- 5.1. Procedures are available that outline appropriate response to environmental incidents, accidents and emergencies
- 5.2. At this level identification and control of environmental hazards relates to own work. Corrective action typically involves recognizing any event which occurs as part of the work process and presents an unacceptable environmental risk or outcome, taking corrective action within level of responsibility, and/or reporting to the appropriate person in the work area
- 5.3. Work responsibilities may involve handling of hazardous waste
- 5.4. An environmental hazard is any activity, product or service that has the potential to affect the environment. This may also be referred to as an environmental aspect
- 5.5. An environmental risk is the likelihood that the hazard can cause harm to the environment
- 5.6. A control measure is a method or procedure used to prevent or minimize environmental risks
- 5.7. Responsibility for identifying and controlling environmental risks relates to immediate work responsibilities
- 5.8. Participating in improvement may involve participation in structured improvement programs, one-off projects and day-to-day problem solving and consultative groups

1.	Critical aspects of
	Competency

Assessment requires evidences that the candidate:

- 1.1 Accessed and apply workplace information on environmental policies and procedures relating to own work
- 1.2 Fitted and used appropriate personal protective clothing and equipment
- 1.3 Checked own work area to identify environmental hazards
- 1.4 Reported hazards according to workplace procedure in a clear and timely manner
- 1.5 Followed work procedures to control or minimize environmental risk. This may include monitoring parameters set for environmental aspects such as airborne particulate, noise, and water quality. It may also include demonstrating use of emergency equipment according to work role requirements
- 1.6 Recorded environmental information as required by the environmental management program
- 1.7 Participated in processes to raise issues and suggestions to improve environmental issues management. This requires appropriate communication skills to structure and present information and interact with others

	<ul> <li>1.8 Followed procedures to collect, deposit, recycle and/or dispose of waste in own work area</li> <li>1.9 Followed procedures to respond to environmental emergencies such as spills and emissions. This may include following procedures to alert the appropriate emergency services</li> </ul>		
	1.10 Maintained housekeeping standards in work area		
2. Resource Implication	The following resources should be provided:		
	<ul><li>2.1 Workplace location and access to workplace policies</li><li>2.2 Materials relevant to the proposed activity and tasks</li></ul>		
3. Methods of Assessment	Competency in this unit must be assessed using at least two (2) of the following methods:		
	1.1 A combination of direct observation and oral questioning		
	1.2 Written report		
	1.3 Written Test		
	1.4 Portfolio		
2. Context of Assessment	4.1 Assessment should occur on the job or in a simulated workplace		

#### **CORE COMPETENCY**

**UNIT OF COMPETENCY: CONDUCT PREPARATORY ACTIVITIES** 

UNIT CODE : AFFXXXXXX

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required

to set up workplace, set up equipment and tools and prepare cans for seaming. Seaming machine can be used in the operation. Safety measures and proper hygiene must be

applied in every task.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE AND ATTITUDE	REQUIRED SKILLS
Set up     workplace	1.1 Safety practices and proper hygiene is applied following OSHS, GMP, SSOP and HACCP 1.2 Work area is cleaned and sanitized following industry standards 1.3 Work area is set following workplace requirement	<ul> <li>1.1 Practice of GMP, SSOP, HACCP and OSHS</li> <li>1.2 Cleaning and sanitizing procedure</li> <li>1.3 Setting up work area</li> </ul>	<ul> <li>1.1 Applying safety practices and proper hygiene</li> <li>1.2 Following GMP, SSOP, HACCP and OSHS</li> <li>1.3 Cleaning and sanitizing work area</li> <li>1.4 Setting work area</li> </ul>
Set up     equipment and     tools	2.1 Safety practices and proper hygiene is applied following OSHS, GMP, SSOP and HACCP  2.2 Equipment and tools are prepared and sanitized following manufacturer's manual and industry standards  2.3 Equipment is calibrated following manufacturer's manual	2.1 Practice of GMP, SSOP, HACCP and OSHS 2.2 Safety practices and proper hygiene 2.3 Types and uses of equipment and tools 2.4 Preparation and sanitization procedure 2.5 Manufacturer's Manual 2.6 Industry procedure 2.7 Calibration methods	2.1 Applying safety practices and proper hygiene  2.2 Preparing and sanitizing equipment and tools  2.3 Following manufacturer's manual  2.4 Calibrating equipment  2.5 Applying safety practices

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Prepare cans for seaming	3.1 Safety practices and proper hygiene is applied following OSHS, GMP, SSOP	3.1 Practice of GMP, SSOP, HACCP and OSHS	3.1 Applying safety practices and proper hygiene
	and HACCP  3.2 Visual inspection is	3.2 Safety practices and proper hygiene	3.2 Conducting visual inspection
	conducted to avoid misplacement of fish in the can following	3.3 Visual inspection procedure	3.3 Checking required
	industry procedure	3.4 Industry procedure	capacity in a can
	3.3 Required capacity per can are checked following industry	3.5 Required capacity per can	3.4 Checking can defect
	procedure	3.6 Defects of can	
	3.4 Cans are checked for defects following industry procedure		

Variables	Range
Equipment and tools	Equipment and tools may include:  1.1 Equipment
Defects	Defects may include: 2.1 Leaks 2.2 Distortion 2.3 Holes

Critical aspects of	Assessment requires evidence that the candidate:	
competency	1.1 Set up workplace	
	1.2 Set up equipment and tools	
	1.3 Prepared cans for seaming	
2. Resource Implications	The following resources MUST be provided:	
· ·	2.1 Actual and simulated workplace	
	2.2 Materials, tools, and equipment needed to perform the required	
	task	
	2.3 References and manuals	
	2.4 PPEs	
	2.5 First aid kit	
3. Methods of Assessment	Competency in this unit should be assessed through:	
	3.1 Demonstration/ observation with oral questioning	
	3.2 Written exam	
4. Context for Assessment	4.1 Competency may be assessed individually in the actual	
	workplace or simulation environment in TESDA accredited	
	institutions	

UNIT OF COMPETENCY: PERFORM SEAMING OPERATION

UNIT CODE : AFFXXXXXX

**UNIT DESCRIPTOR** : The unit deals with the knowledge, skills and attitudes required

to operate seaming machine, monitor performance of seaming machine, lubricate seaming machine, inspect sealed cans and

apply corrective actions.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE AND ATTITUDE	REQUIRED SKILLS
1.Operate seaming machine	<ul> <li>1.1Safety practices and proper hygiene is applied following OSHS, GMP, SSOP and HACCP</li> <li>1.2 Cans and lids are placed to the assigned area following industry procedure</li> <li>1.3 Sealing of can is performed based on equipment's operational manual</li> </ul>	<ul> <li>1.1 Practice of GMP, SSOP, HACCP and OSHS</li> <li>1.2 Safety practices and proper hygiene</li> <li>1.3 Cans and lids</li> <li>1.4 Industry procedure</li> <li>1.5 Operate seaming machine</li> <li>1.6 Sealing procedure</li> <li>1.7 Equipment's Operational Manual</li> </ul>	<ul> <li>1.1 Applying safety practices and proper hygiene</li> <li>1.2 Placing cans and lids</li> <li>1.3 Following equipment's operational manual</li> <li>1.4 Sealing of can</li> </ul>
2.Monitor performance of seaming machine	<ul> <li>2.1 Safety practices and proper hygiene is applied following OSHS, GMP, SSOP and HACCP</li> <li>2.2 Time and duration per cycle are monitored following industry procedure</li> <li>2.3 Temperature and pressure are checked following industry procedure</li> </ul>	2.1 Practice of GMP, SSOP, HACCP and OSHS  2.2 Safety practices and proper hygiene  2.3 Monitoring procedure  2.4 Time and duration per cycle	<ul> <li>2.1 Applying safety practices and proper hygiene</li> <li>2.2 Monitoring time and duration per cycle</li> <li>2.3 Checking temperature and pressure</li> <li>2.4 Conducting record keeping</li> </ul>

	2.4 Record keeping is	2.5 Temperature and	2.5 Communication
	conducted following industry procedure	pressure of seaming machine	skills
		2.6 Record keeping	
		2.7 Communication	
		skills	
3. Lubricate seaming machine	3.1Safety practices and proper hygiene is applied following OSHS, GMP, SSOP	3.1 Practice of GMP, SSOP, HACCP and OSHS	3.1 Applying safety practices and proper hygiene
	and HACCP	3.2 Safety practices and proper	3.2 Shutting off seamer machine
	3.2 Seaming is shut off following manufacturer's	hygiene Seaming process	Measuring food grade lubricant
	manual	3.3 Shutting off procedure	3.3 Administering lubrication
	3.3 Food grade lubricant		
	is measured based on manufacturer's manual	3.4 Food grade lubrication	3.4 Checking equipment
	mariaar	3.5 Lubrication	3.5 Performing record
	3.4 Lubrication is administered	procedure	keeping
	following manufacturer's manual	3.6 Manufacturer's manual	3.6 Setting equipment for operation
		3.7 Checking of	3.7 Performing
	3.5 Equipment is checked to ensure proper	equipment	mensuration
	lubrication following industry procedure	3.8 Record keeping	3.8 Communication
	, ,	3.9 Operation of	
	3.6 Record keeping is performed following	equipment	
	industry procedure	3.10 Basic mathematical	
	3.7 Equipment is set for operation following	operation	
	manufacturer's manual	3.11 Mensuration	
		3.12 Communication skills	
4.Inspect sealed cans	4.1 Safety practices and proper hygiene is applied following OSHS, GMP, SSOP	4.1 Practice of GMP, SSOP, HACCP and OSHS	4.1 Applying safety practices and proper hygiene
	and HACCP	4.2 Safety practices and proper	4.2 Conducting visual inspection to sealed
	4.2 Sealed cans are visually inspected for integrity	hygiene	cans

	following industry	4.3 Inspection	4.3 Conducting record
	procedure	procedure	keeping
	4.3 Record keeping is	4.4 Sealing procedure	4.4 Coordinating with
	conducted following industry procedure	4.5 Record keeping	quality control officer
	madstry procedure	4.5 Record Recping	Officer
	4.4 Coordination with	4.6 Communication	4.5 Communication
	quality control officer is done following	skills	skills
	industry procedure	4.7 Coordination	
		procedure	
5. Apply corrective actions	5.1 Safety practices and proper hygiene is	5.1 Practice of GMP, SSOP, HACCP	5.1 Applying safety practices and
actions	applied following	and OSHS	proper hygiene
	OSHS, GMP, SSOP		
	and HACCP	5.2 Safety practices	5.2 Interpreting recommended
	5.2 Recommended	and proper hygiene	corrective action
	corrective action is	riygiche	CONCOUVE action
	interpreted following	5.3 Interpreting and	5.3 Applying corrective
	industry procedure	applying corrective actions	actions
	5.3 Recommended		5.4 Conducting record
	corrective action is applied following	5.4 Corrective actions	keeping and documentation
	industry procedure	5.5 Recommended	
	5.4 Record keeping and	corrective actions	5.5 Communication skills
	documentation is	5.6 Record keeping	SIIIIO
	done following	and documentation	
	industry procedure		
		5.7 Communication	
		skills	

VARIABLES	RANGE
1. Corrective action	Corrective action includes:
	1.1 Adjustment of pressure
	1.2 Adjustment of time
	1.3 Adjustment of speed
	1.4 Adjustment of space
	1.5 Adjustment of height

Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 operated seaming machine 1.2 monitored performance of seaming machine 1.3 lubricated seaming machine 1.4 inspected sealed cans 1.5 Applied corrective actions
2. Resource Implications	The following resources MUST be provided: 2.1 Actual and simulated workplace 2.2 Materials, tools, and equipment needed to perform the required task 2.3 References and manuals 2.4 PPEs 2.5 First aid kit
3. Methods of Assessment	Competency in this unit should be assessed through: 3.1 Demonstration/ observation with oral questioning 3.2 Written exam
Context for Assessment	4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions

UNIT OF COMPETENCY: PERFORM QUALITY CONTROL

UNIT CODE : AFFXXXXXX

UNIT DESCRIPTOR : The unit deals with the knowledge, skills and attitudes

required to inspect materials, evaluate and analyze sample

product.

ELEMENT	PERFORMANCE CRITERIA Italicized terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE AND ATTITUDE	REQUIRED SKILLS
1. Inspect materials	1.1 Safety practices and proper hygiene is applied following OSHS, GMP, SSOP and HACCP  1.2 Cans and lids are checked following industry procedure  1.3 Cans and lids are inspected visually to avoid distortion of the seal following industry	<ul> <li>1.1 Practice of GMP, SSOP, HACCP and OSHS</li> <li>1.2 Safety practices and proper hygiene</li> <li>1.3 Inspection and checking of cans and lids</li> <li>1.4 Record keeping</li> </ul>	<ul> <li>1.1 Applying safety practices and proper hygiene</li> <li>1.2 Checking cans and lids</li> <li>1.3 Inspecting cans and lids</li> <li>1.4 Conducting record keeping</li> <li>1.5 Communication</li> </ul>
	procedure  1.4 Record keeping is performed following industry procedure	1.5 Communication skills	skills
2. Evaluate and analyze sample product	2.1 Safety practices and proper hygiene is applied following OSHS, GMP, SSOP and HACCP  2.2 Sampling of sealed cans is conducted following industry procedure  2.3 Initial findings are verified based on industry procedure	2.1 Practice of GMP, SSOP, HACCP and OSHS  2.2 Safety practices and proper hygiene  2.3 Quality sealed cans  2.4 Defective sealed cans  2.5 Sampling procedure	2.1 Applying safety practices and proper hygiene  2.2 Sampling sealed cans  2.3 Verifying initial findings

		2.6 Process of verification and validation  2.7 Read and interpret  2.8 Troubleshooting process	
		2.9 Communication Skills	
3. Prepare recommendation	3.1 Findings are recorded following industry	3.1 Preparation and submission of	3.1 Recording findings
	procedure	recommendation	3.2 Preparing recommendation
	3.2 Recommendation is	3.2 Purpose of	
	prepared following industry procedures	recommendation	3.3 Submitting recommendations
		3.3 Communication	
	3.3 Recommendation is referred to appropriate personnel following industry procedure	skills	3.4 Communication skills

Variables	Range
Checking cans and lids	May include: 1.1 Checking of thickness 1.2 Checking of size 1.3 Checking of can design

Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Inspected materials 1.2 Evaluated and analyzed sample products 1.3 Prepared recommendation
2. Resource Implications	The following resources MUST be provided: 2.1 Actual and simulated workplace 2.2 Materials, tools, and equipment needed to perform the required task 2.3 References and manuals 2.4 PPEs 2.5 First aid kit
3. Methods of Assessment	Competency in this unit should be assessed through: 3.1 Demonstration/ observation with oral questioning 3.2 Written exam
4. Context for Assessment	4.1 Competency may be assessed individually in the actual workplace or simulation environment in TESDA accredited institutions

# **SECTION 3: TRAINING ARRANGEMENTS**

#### TRAINEE ENTRY REQUIREMENTS

Trainees or students wishing to gain entry into this course must possess the following requirements:

- Good communication skills; and
- Basic mathematical skills

### TRAINER'S QUALIFICATIONS FOR SEAMER OPERATION LEVEL II

The trainer shall have the following qualifications:

- Must have at least 2 years industry experience on seamer operation
- Must have training of trainers certificate <u>OR</u> must be a practicing trainer for two (2) years within the last 5 years

# **GLOSSARY OF TERMS**

Air tight Excludes the passage of air oxygen or other gasses

Hermetic seal Type of sealing that makes a given object air tight

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#### THE TECHNICAL AND INDUSTRY EXPERT PANEL

#### MR. RENE R. AGATA

Technical Expert
Dipolog School of Fisheries
Olingan, Dipolog City

#### MR. ROMMEL D. CADALINIA

Technical Expert
Ayala Seafoods Corporation
Ayala, Zamboanga City

#### MR. FRANCISCO S. DELASALA

Technical Expert
Dipolog School of Fisheries
Olingan, Dipolog City

#### MR. LICINIO G. LAÑOJAN

Technical Expert
Dipolog School of Fisheries
Olingan, Dipolog City

#### MR. ALADINO PANDES

Technical Expert Mega Fishing Corporation Cawit, Zamboanga City

#### MR. LUCY B. PANON

Technical Expert
Ayala Seafoods Corporation
Ayala, Zamboanga City

#### MR. RENE A. RECAMORA

Technical Expert
Dipolog School of Fisheries
Olingan, Dipolog City

#### MR. AKHMAD YADZDI L. SALMANI

Technical Expert Ayala Seafoods Corporation Ayala, Zamboanga City

#### MR. NORIEL C. SORIANO

Technical Expert Ayala Seafoods Corporation Ayala, Zamboanga City

#### MR. JOHNNY M. TEMPLADO

Technical Expert Ayala Seafoods Corporation Ayala, Zamboanga City