

COMPETENCY STANDARDS



CONSTRUCTION SITE SUPERVISION LEVEL IV

**CIVIL WORKS
(CONSTRUCTION SECTOR)**

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
East Service Road, South Luzon Expressway (SLEX), Taguig City, Metro Manila, Philippines

*Technical Education and Skills Development Act of 1994
(Republic Act No. 7796)*

Section 22, “Establishment and Administration of the National Trade Skills Standards” of the RA 7796 known as the TESDA Act mandates TESDA to establish national occupational skill standards. The Authority shall develop and implement a certification and accreditation program in which private industry group and trade associations are accredited to conduct approved trade tests, and the local government units to promote such trade testing activities in their respective areas in accordance with the guidelines to be set by the Authority.

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**COMPETENCY STANDARD FOR
CONSTRUCTION SITE SUPERVISION LEVEL IV**

SECTION 1: CONSTRUCTION SITE SUPERVISION QUALIFICATION

The **CONSTRUCTION SITE SUPERVISION LEVEL IV** Qualification consists of competencies that a person must achieve in supervising construction site work activities.

The units of competency comprising this qualification include the following:

CODE NO.	BASIC COMPETENCIES
500311115	Utilize specialized communication skills
500311116	Develop teams and individuals
500311117	Apply problem solving techniques in the workplace
500311118	Collect, analyze and organize information
500311119	Plan and organize work
500311120	Promote environmental protection
500311150	Manage innovation and continuous improvement
500311151	Perform higher-order thinking processes and apply techniques in the workplace
500311155	Lead in implementation of occupational safety and health program, procedures and policies/guidelines
CODE NO.	COMMON COMPETENCIES
CON931201	Prepare construction materials and tools
CON311201	Observe procedures, specifications and manuals of instruction
CON311202	Interpret technical drawings and plans
CON311203	Perform mensurations and calculations
CON311204	Maintain tools and equipment
CODE NO.	CORE COMPETENCIES
CON312337	Plan and organize work activities
CON312338	Resolve construction work related issues
CON312339	Lead work groups
CON312340	Evaluate work group accomplishment
CON312341	Maintain quality, environmental, health, safety (QEHS) and company policies compliance

A person who has achieved this Qualification is competent to be a –

- Construction Site Supervisor

SECTION 2 COMPETENCY STANDARDS

This section gives the details and contents of the units of competency required in **CONSTRUCTION TRADE SUPERVISION LEVEL IV**. These units of competency are categorized into basic, common and core competencies.

BASIC COMPETENCIES

UNIT OF COMPETENCY: UTILIZE SPECIALIZED COMMUNICATION SKILLS

UNIT CODE : 500311115

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to use specialized communication skills to meet specific needs of internal and external clients, conduct interviews, facilitate group of discussions, and contribute to the development of communication strategies.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Meet common and specific communication needs of clients and colleagues	1.1. Specific communication needs of clients and colleagues are identified and met 1.2. Different approaches are used to meet communication needs of clients and colleagues 1.3. Conflict is addressed promptly and in a timely way and in a manner which does not compromise the standing of the organization	1.1 Communication process 1.2 Dynamics of groups and different styles of group leadership 1.3 Communication skills relevant to client groups	1.1 Full range of communication techniques including: 1.1.1 Full range of communication 1.1.2 Active listening 1.1.3 Feedback 1.1.4 Interpretation 1.1.5 Role boundaries setting 1.1.6 Negotiation 1.1.7 Establishing empathy 1.2 Communication skills required to fulfill job roles as specified by the organization
2. Contribute to the development of communication strategies	2.1. Strategies for internal and external dissemination of information are developed, promoted, implemented and reviewed as required 2.2. Channels of communication are established and reviewed regularly 2.3. Coaching in effective	2.1 Different communication strategies 2.2 Strategies in negotiations and conflict resolution	2.1 Full range of communication techniques including: 2.1.1 Active listening 2.1.2 Feedback 2.1.3 Interpretation 2.1.4 Role boundaries setting 2.1.5 Negotiation 2.1.6 Establishing empathy 2.2 Communication skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>communication is provided</p> <p>2.4. Work related network and relationship are maintained as necessary</p> <p>2.5. Negotiation and conflict resolution strategies are used where required</p> <p>2.6. Communication with clients and colleagues is appropriate to individual needs and organizational objectives</p>		<p>required to fulfill job roles as specified by the organization</p>
<p>3. Represent the organization</p>	<p>3.1. When participating in internal or external forums, presentation is relevant, appropriately researched and presented in a manner to promote the organization</p> <p>3.2. Presentation is clear and sequential and delivered within a predetermined time</p> <p>3.3. Utilize appropriate media to enhance presentation</p> <p>3.4. Differences in views are respected</p> <p>3.5. Written communication is consistent with organizational standards</p> <p>3.6. Inquiries are responded in a manner consistent with organizational standard</p>	<p>3.1. Communication process</p> <p>3.2. Communication skills relevant to client groups</p> <p>3.3. Appropriate presentation tools and materials</p>	<p>3.1. Computer skills</p> <p>3.2. Communication skills required to fulfill job roles as specified by the organization</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
4. Facilitate group discussion	4.1 Mechanisms which enhance effective group interaction is defined and implemented 4.2 Strategies which encourage all group members to participate are used routinely 4.3 Objectives and agenda for meetings and discussions are routinely set and followed 4.4 Relevant information is provided to group to facilitate outcomes 4.5 Evaluation of group communication strategies is undertaken to promote participation of all parties 4.6 Specific communication needs of individuals are identified and addressed	4.1 Communication process 4.2 Dynamics of groups and different styles of group leadership 4.3 Communication skills relevant to client groups	4.1. Full range of communication techniques including: 4.1.1. Role boundaries setting 4.1.2. Negotiation 4.1.3. Establishing empathy 4.2. Communication skills required to fulfill job roles as specified by the organization
5. Conduct interview	5.1. A range of appropriate communication strategies are employed in interview situations 5.2. Records of interviews are made and maintained in accordance with organizational procedures 5.3. Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated	5.1 Communication process 5.2 Effective questioning, listening and nonverbal communication techniques 5.3 Communication skills relevant to client groups 5.4 Types of Interview	5.1. Full range of communication techniques including: 5.1.1. Active listening 5.1.2. Feedback 5.1.3. Negotiation 5.1.4. Establishing empathy 5.2. Communication skills required to fulfill job roles as specified by the organization

RANGE OF VARIABLES

VARIABLE	RANGE
1. Strategies	1.1 Recognizing own limitations 1.2 Referral to specialists 1.3 Utilizing techniques and aids 1.4 Providing written drafts 1.5 Verbal and non verbal communication
2. Effective group interaction	2.1 Identifying and evaluating what is occurring within an interaction in a non-judgmental way 2.2 Using active listening 2.3 Making decision about appropriate words, behavior 2.4 Putting together response which is culturally appropriate 2.5 Expressing an individual perspective 2.6 Expressing own philosophy, ideology and background and exploring impact with relevance to communication
3. Types of Interview	3.1 Related to staff issues 3.2 Routine 3.3 Confidential 3.4 Evidential 3.5 Non-disclosure 3.6 Disclosure
4. Interview situations	4.1 Establish rapport 4.2 Elicit facts and information 4.3 Facilitate resolution of issues 4.4 Develop action plans 4.5 Diffuse potentially difficult situation

EVIDENCE GUIDE

1. Critical aspects of Competency	Assessment requires evidence that the candidate: 1.1. Demonstrated effective communication skills with clients accessing service and work colleagues 1.2. Adopted relevant communication techniques and strategies to meet client particular needs and difficulties
2. Resource Implications	2.1. Access to appropriate workplace where assessment can take place
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1. Direct observation 3.2. Oral Interview
4. Context for Assessment	4.1. This unit should be assessed on the job through simulation

UNIT OF COMPETENCY : DEVELOP TEAMS AND INDIVIDUALS

UNIT CODE : 500311116

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes required to determine individual and team development needs and facilitate the development of the workgroup.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Provide team leadership	1.1 Learning and development needs are systematically identified and implemented in line with organizational requirements 1.2 Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented 1.3 Individuals are encouraged to self-evaluate performance and identify areas for improvement 1.4 Feedback on performance of team members is collected from relevant sources and compared with established team learning process	1.1. Coaching and mentoring principles 1.2. Understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective 1.3. Understanding how to facilitate team development and improvement 1.4. Understanding methods and techniques for eliciting and interpreting feedback	1.1. Ability to : 1.1.1. Read and understand a variety of texts, 1.1.2. Prepare general information and documents according to target audience; 1.1.3. Spell with accuracy; 1.1.4. Use grammar and punctuation effective relationships and conflict management 1.2. Communication skills 1.3. Coaching and mentoring skills to provide support to colleagues
2. Foster individual and organizational growth	2.1. Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of competency standards 2.2. Learning delivery methods are appropriate to the learning goals, the learning style of participants and availability of equipment and resources 2.3. Workplace learning	2.1. Coaching and mentoring principles 2.2. Understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective 2.3. Understanding methods and techniques for eliciting and interpreting feedback	2.1. Communication skills including receiving feedback and reporting, maintaining effective relationships and conflict management 2.2. Coaching and mentoring skills to provide support to colleagues 2.3. Reporting skills to organize information; assess information for

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies</p> <p>2.4. Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements</p>		<p>relevance and accuracy; identify and elaborate on learning outcomes</p> <p>2.4. Facilitation skills to conduct small group training sessions</p>
3. Monitor and evaluate workplace learning	<p>3.1 Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements</p> <p>3.2 Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support</p> <p>3.3 Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning</p> <p>3.4 Records and reports of competency are maintained within organizational requirement</p>	<p>3.1. Understanding how to facilitate team development and improvement</p> <p>3.2. Understanding methods and techniques for eliciting and interpreting feedback</p> <p>3.3. Understanding methods for identifying and prioritizing personal development opportunities and options</p> <p>3.4. Knowledge of career paths and competency standards in the industry</p>	<p>3.1. Communication skills including receiving feedback and reporting, maintaining effective relationships and conflict management</p> <p>3.2. Coaching and mentoring skills to provide support to colleagues</p> <p>3.3. Reporting skills to organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes</p> <p>3.4. Ability to relate to people from a range of social, cultural, physical and mental backgrounds</p>
4. Develop team commitment and cooperation	<p>4.1. Open communication processes to obtain and share information is used by team</p> <p>4.2. Decisions are reached by the team in accordance with its agreed roles and responsibilities</p> <p>4.3. Mutual concern and camaraderie are developed in the team</p>	<p>4.1. Understanding methods and techniques for eliciting and interpreting feedback</p> <p>4.2. Understanding methods for identifying and prioritizing personal development opportunities and options</p>	<p>4.1. Communication skills including receiving feedback and reporting, maintaining effective relationships and conflict management</p> <p>4.2. Coaching and mentoring skills to provide support to colleagues</p> <p>4.3. Facilitation skills to conduct small group training sessions</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		4.3. Knowledge of career paths and competency standards in the industry	4.4. Ability to relate to people from a range of social, cultural, physical and mental backgrounds
5. Facilitate accomplishment of organizational goals	<p>5.1 Team members actively participated in team activities and communication processes</p> <p>5.2 Teams members developed individual and joint responsibility for their actions</p> <p>5.3 Collaborative efforts are sustained to attain organizational goals</p>	<p>5.1. Team activities and communication processes</p> <p>5.2. Understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective</p> <p>5.3. Understanding how to facilitate team development and improvement</p> <p>4.4. Knowledge of career paths and competency standards in the industry</p>	<p>5.1. Communication skills including receiving feedback and reporting, maintaining effective relationships and conflict management</p> <p>5.2. Planning skills to organize required resources and equipment to meet learning needs</p> <p>5.3. Coaching and mentoring skills to provide support to colleagues</p> <p>5.4 Ability to relate to people from a range of social, cultural, physical and mental backgrounds</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Learning and development needs	May include: <ul style="list-style-type: none"> 1.1 Coaching, mentoring and/or supervision 1.2 Formal/informal learning program 1.3 Internal/external training provision 1.4 Work experience/exchange/opportunities 1.5 Personal study 1.6 Career planning/development 1.7 Performance appraisals 1.8 Workplace skills assessment 1.9 Recognition of prior learning
2. Organizational requirements	May include: <ul style="list-style-type: none"> 2.1 Quality assurance and/or procedures manuals 2.2 Goals, objectives, plans, systems and processes 2.3 Legal and organizational policy/guidelines and requirements 2.4 Safety policies, procedures and programs 2.5 Confidentiality and security requirements 2.6 Business and performance plans 2.7 Ethical standards 2.8 Quality and continuous improvement processes and standards
3. Feedback on performance	May include: <ul style="list-style-type: none"> 3.1 Formal/informal performance appraisals 3.2 Obtaining feedback from supervisors and colleagues 3.3 Obtaining feedback from clients 3.4 Personal and reflective behavior strategies 3.5 Routine and organizational methods for monitoring service delivery
4. Learning delivery methods	May include: <ul style="list-style-type: none"> 4.1 On the job coaching or mentoring 4.2 Problem solving 4.3 Presentation/demonstration 4.4 Formal course participation 4.5 Work experience 4.6 Involvement in professional networks 4.7 Conference and seminar attendance 4.8 Induction

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Identified and implemented learning opportunities for others 1.2. Gave and received feedback constructively 1.3. Facilitated participation of individuals in the work of the team 1.4. Negotiated learning plans to improve the effectiveness of learning 1.5. Prepared learning plans to match skill needs 1.6. Accessed and designated learning opportunities
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2. Materials relevant to the proposed activity or tasks
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Observation of work activities of the individual member in relation to the work activities of the group 3.2. Observation of simulation and or role play involving the participation of individual member to the attainment of organizational goal 3.3. Case studies and scenarios as a basis for discussion of issues and strategies in teamwork
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 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 : APPLY PROBLEM SOLVING TECHNIQUES IN THE WORKPLACE

UNIT CODE : 500311117

UNIT DESCRIPTOR : This competency covers the knowledge, skills and attitudes required to apply the process of problem solving and other problems beyond those associated directly with the process unit. It includes the application of structured processes and improvement tools. This competency is typically performed by an experienced technician, team leader or supervisor.

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Analyze the problem <i>(Use system thinking)</i>	1.1. Issues/concerns are evaluated based on data gathered 1.2. Possible causes of problem are identified within the area of responsibility as based on experience and the use of problem solving tools/analytical techniques 1.3. Possible cause statements are developed based on findings	1.1. Broad understanding of systems, organizational systems and functions 1.2. Broad knowledge of help desk and maintenance practices 1.3. Broad knowledge of the client business domain 1.4. Broad knowledge based of diagnostic tools 1.5. General principles of OHS 1.6. Divisional/unit responsibilities	1.1. Decision making within a limited range of options. 1.2. Communication is clear, precise and varies according to the type of audience 1.3. Time management as applied to self-management. 1.4. Analytical skills in relation to routine malfunctions.
2. Identify possible solutions	2.1 All possible options are considered for resolution of the problem in accordance with safety and operating procedures 2.2 Strengths and weaknesses of possible options are considered 2.3 Corrective action is determined to resolve the problem and its possible future causes	2.1. Broad understanding of systems, organizational systems and functions 2.2. Broad knowledge of help desk and maintenance practices 2.3. Current industry accepted hardware and software products with broad and detailed knowledge of its general features and capabilities 2.4. Broad knowledge of the operating	2.1. Decision making within a limited range of options. 2.2. Communication is clear, precise and varies according to the type of audience 2.3. Teamwork in reference to personal responsibility 2.4. Time management as applied to self-management. 2.5. Analytical skills in relation to routine malfunctions. 2.6. General customer service skills displayed

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		system 2.5. Broad knowledge of the client business domain 2.6. Broad knowledge based of diagnostic tools	2.7. Questioning and active listening is employed to clarify general information
3. Recommend solution to higher management <i>(Make judgment and decisions/ Solve problems)</i>	3.1. Report/ communication or documentation are prepared 3.2. Recommendations are presented to appropriate personnel 3.3. Recommendations are followed-up, if required	3.1. Broad understanding of systems, organizational systems and functions 3.2. Broad knowledge of help desk and maintenance practices 3.3. Broad knowledge of the operating system 3.4. Broad knowledge of the client business domain 3.5. Broad knowledge based incorporating current industry practices related to escalation procedures 3.6. Broad knowledge based of diagnostic tools	3.1. Decision making within a limited range of options. 3.2. Communication is clear, precise and varies according to the type of audience 3.3. Teamwork in reference to personal responsibility 3.4. Time management as applied to self-management. 3.5. Analytical skills in relation to routine malfunctions. 3.6. General customer service skills displayed
4. Implement solution	4.1. Measurable objectives are identified 4.2. Resource needs are identified 4.3. Timelines are identified in accordance with plan	4.1. Broad knowledge of help desk and maintenance practices 4.2. Broad knowledge of the client business domain 4.3. Broad knowledge based incorporating current industry practices related to escalation procedures 4.4. Broad knowledge based of diagnostic tools 4.5. General principles of OHS 4.6. Divisional/unit responsibilities	4.1. Decision making within a limited range of options. 4.2. Time management as applied to self-management. 4.3. Analytical skills in relation to routine malfunctions. 4.4. General customer service skills displayed. 4.5. Questioning and active listening is employed to clarify general information

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
5. Evaluate/ Monitor results and outcome	5.1. Processes and improvements are identified based on evaluative assessment of problem 5.2. Recommendations are prepared and submitted to superiors.	5.1. Broad knowledge of the client business domain 5.2. Broad knowledge based incorporating current industry practices related to escalation procedures 5.3. Broad knowledge based of diagnostic tools 5.4. General principles of OHS 5.5. Divisional/unit responsibilities	5.1. Time management as applied to self-management. 5.2. Analytical skills in relation to routine malfunctions. 5.3. General customer service skills displayed. 5.4. Questioning and active listening is employed to clarify general information

RANGE OF VARIABLES

VARIABLE	RANGE
1. Area of responsibility	May include: 1.1. Work environment 1.2. Problem solution processes 1.3. Preventative maintenance and diagnostic policy 1.4. Roles and technical responsibilities
2. Occupational Health and Safety	May include: 2.1. As per company, statutory and vendor requirements. Ergonomic and environmental factors must be considered during the demonstration of this competency.
3. Communication	May include: 3.1. Variables may include but are not limited to: 3.2. Written communication can involve both hand written and printed material, internal memos, electronic mail, briefing notes and bulletin boards.
4. Documentation	May include: 4.1. Audit trails 4.2. Naming standards 4.3. Version control

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1. Analyzed the problem 1.2. Identified possible solutions 1.3. Implemented solutions 1.4. Recommended solutions to higher management 1.5. Outcome evaluated/monitored <p>Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate knowledge and understanding of the elements of the competency and performance criteria.</p>
<p>2. Resource Implications</p>	<p>Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations. A bank of scenarios/case studies/what ifs will be required as well as bank of questions which will be used to probe the reasoning behind the observable actions.</p>
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <p>Through direct observation of application to tasks and questions related to underpinning knowledge</p> <p>Under general guidance, checking various stages of operation and at the completion of the activity against performance criteria and specifications</p>
<p>4. Context for Assessment</p>	<ol style="list-style-type: none"> 4.1. Competency may be assessed in the work place or in a simulated work place setting 4.2. Assessment shall be carried out through TESDA's Accredited Assessment Centers/Venues while tasks are undertaken either individually or as part of a team under limited supervision

UNIT OF COMPETENCY : COLLECT, ANALYZE AND ORGANIZE INFORMATION

UNIT CODE : 500311118

UNIT DESCRIPTOR : This unit covers the outcomes required to process, analyze, interpret and organize workplace information and other relevant data.

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Study information requirements	1.1. Needs are identified using established research procedures 1.2. Relevant forms and recording systems are used to gather the information 1.3. Respondents are selected to implement survey / research based on established procedures	1.1. Data processing, Information analysis and interpretation 1.2. Research methods 1.2.1. Qualitative 1.2.2. Quantitative 1.2.3. Statistical 1.3. Report writing 1.4. Use of relevant software 1.4.1. Spreadsheets 1.4.2. Presentation graphics 1.4.3. Work processor 1.4.4. Statistical package	1.1. Communicating effectively 1.2. Performing research 1.3. Reading / interpreting data and information 1.4. Problem solving
2. Process data	2.1. Data are collected and collated based on the prescribed method. 2.2. Relevant data are used as references in accordance with the objectives of the program. 2.3. Information is compiled according to the required form	2.1. Data processing, Information analysis and interpretation 2.2. Research methods 2.2.1. Qualitative 2.2.2. Quantitative 2.2.3. Statistical 2.3. Report writing	2.1. Communicating effectively 2.2. Performing research 2.3. Reading / interpreting data and information 2.4. Problem solving
3. Analyze, interpret and organize information gathered	3.1. Data are analyzed using relevant methodologies 3.2. Where applicable, statistical analysis/methods are employed according to the objectives of the program 3.3. Graphs and other visual presentations are prepared to facilitate analysis / interpretation of information	3.1. Data processing, Information analysis and interpretation 3.2. Research methods 3.2.1. Qualitative 3.2.2. Quantitative 3.2.3. Statistical 3.3. Report writing 3.4. Use of relevant software 3.4.1. Spreadsheets 3.4.2. Presentation graphics 3.4.3. Work processor 3.4.4. Statistical package	3.1. Communicating effectively 3.2. Performing research 3.3. Reading / interpreting data and information 3.4. Problem solving

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
4. Present findings/ recommendations	4.1. Findings/ recommendations summarized and presented/packaged in user-friendly manner 4.2. Relevant inputs gathered to finalize report 4.3. Draft report prepared based on standard format. 4.4. Technical reports are submitted and disseminated to concerned offices.	4.1. Data processing, Information analysis and interpretation 4.2. Research methods 4.2.1. Qualitative 4.2.2. Quantitative 4.2.3. Statistical 4.3. Report writing 4.4. Use of relevant software 4.4.1. Spreadsheets 4.4.2. Presentation graphics 4.4.3. Work processor 4.4.4. Statistical package	4.1. Communicating effectively 4.2. Performing research 4.3. Reading / interpreting data and information 4.4. Problem solving

RANGE OF VARIABLES

VARIABLE	RANGE
1. Research procedures	May include: 1.1 TNA 1.2 Front-end analysis 1.3 Surveys 1.4 Interviews 1.5 Functional analysis 1.6 DACUM research
2. Forms	May include: 2.1 Survey forms/Questionnaires 2.2 Personal information/Profile 2.3 Accident report form 2.4 Requisition slip 2.5 Job orders 2.6 Purchase request form 2.7 Incident report form
3. Methodologies	May include: 3.1 Qualitative methods 3.2 Quantitative methods
4. Statistical analysis/ methods	May include: 4.1. Averages (Mean, Median, Mode) 4.2. Percentage 4.3. Ranks 4.4. Frequency Distribution 4.5 Statistical test
5. Data	May include: 5.1 Raw Data
6. Information	May include: 6.1 Processed and packaged data

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Determined information requirements based on organizational goals and objectives. 1.2 Used relevant forms and recording systems to gather data 1.3 Processed data based on the objectives of the program 1.4 Utilized relevant research methods based on the objective of the program 1.5 Analyzed and organized information gathered 1.6 Submitted/Disseminated technical reports to concerned offices
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Workplace or assessment location 2.2 Access to office equipment and facilities relevant to the unit 2.3 Case studies/scenarios
<p>3. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Written/ Oral Examination 3.2 Interviews 3.3 Portfolio
<p>4. Context for Assessment</p>	<ul style="list-style-type: none"> 4.1 Competency may be assessed in actual workplace or TESDA Accredited Assessment Center

UNIT OF COMPETENCY : PLAN AND ORGANIZE WORK

UNIT CODE : 500311119

UNIT DESCRIPTOR : This unit covers the outcomes required in planning and organizing work. It may be applied to a small independent operation or to a section of a large organization.

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Set objectives	1.1 Objectives are consistent with and linked to work activities in accordance with organizational aims 1.2 Objectives are stated as measurable targets with clear time frames 1.3 Support and commitment of team members are reflected in the objectives 1.4 Realistic and attainable objectives are identified	1.1. Organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities 1.2. Organizations policies, strategic plans, guidelines related to the role of the work unit 1.3. Team work and consultation strategies	1.1. Planning 1.2. Leading 1.3. Organizing 1.4. Coordinating 1.5. Communication Skills 1.6. Inter-and intra-person/ motivation skills
2. Plan and schedule work activities	2.1 Tasks/work activities to be completed are identified and prioritized as directed 2.2 Tasks/work activities are broken down into steps in accordance with set time frames achievable components in accordance with set time frames 2.3 Resources are allocated as per requirements of the activity 2.4 Schedule of work activities is coordinated with personnel concerned	2.1. Organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities 2.2. Organizations policies, strategic plans, guidelines related to the role of the work unit 2.3. Team work and consultation strategies	2.1. Planning 2.2. Leading 2.3. Organizing 2.4. Coordinating 2.5. Communication Skills 2.6. Inter-and intra-person/ motivation skills
3. Implement work plans	3.1 Work methods and practices are identified in consultation with personnel concerned 3.2 Work plans are implemented in accordance with set time frames, resources and standards	3.1. Organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities 3.2. Organizations policies, strategic	3.1. Planning 3.2. Leading 3.3. Organizing 3.4. Coordinating 3.5. Communication Skills 3.6. Inter-and intra-person/ motivation skills

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		plans, guidelines related to the role of the work unit 3.3. Team work and consultation strategies	
4. Monitor work activities	4.1 Work activities are monitored and compared with set objectives 4.2 Work performance is monitored 4.3 Deviations from work activities are reported and recommendations are coordinated with appropriate personnel and in accordance with set standards 4.4 Reporting requirements are complied with in accordance with recommended format 4.5 Observe timeliness of report 4.6 Files are established and maintained in accordance with standard operating procedures	4.1. Organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities 4.2. Organizations policies, strategic plans, guidelines related to the role of the work unit 4.3. Team work and consultation strategies	4.1. Planning 4.2. Leading 4.3. Organizing 4.4. Coordinating 4.5. Communication Skills 4.6. Inter-and intra-person/ motivation skills
5. Review and evaluate work plans and activities	5.1. Work plans, strategies and implementation are reviewed based on accurate, relevant and current information 5.2. Review is based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback 5.3. Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities 5.4. Performance appraisal is conducted in accordance with organization rules	5.1. Organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities 5.2. Organizations policies, strategic plans, guidelines related to the role of the work unit 5.3. Team work and consultation strategies	5.1. Planning 5.2. Leading 5.3. Organizing 5.4. Coordinating 5.5. Communication Skills 5.6. Inter-and intra-person/ motivation skills

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	and regulations 5.5. Performance appraisal report is prepared and documented regularly as per organization requirements. 5.6. Recommendations are prepared and presented to appropriate personnel/authorities 5.7. Feedback mechanisms are implemented in line with organization policies		

RANGE OF VARIABLES

VARIABLE	RANGE
1. Objectives	May include: 1.1. Specific 1.2. General
2. Resources	May include: 2.1. Personnel 2.2. Equipment and technology 2.3. Services 2.4. Supplies and materials 2.5. Sources for accessing specialist advice 2.6. Budget
3. Schedule of work activities	May include: 3.1. Daily 3.2. Work-based 3.3. Contractual 3.4. Regular 3.5. Confidential 3.6. Disclosure 3.7. Non-disclosure
4. Work methods and practices	Work methods and practices may include but not limited to: 4.1. Legislated regulations and codes of practice 4.2. Industry regulations and codes of practice 4.3. Occupational health and safety practices

VARIABLE	RANGE
5. Work plans	May include: 5.1. Daily work plans 5.2. Project plans 5.3. Program plans 5.4. Organization strategic and restructuring plans 5.5. Resource plans 5.6. Skills development plans 5.7. Management strategies and objectives
6. Standards	May include: 6.1. Performance targets 6.2. Performance management and appraisal systems 6.3. National competency standards 6.4. Employment contracts 6.5. Client contracts 6.6. Discipline procedures 6.7. Workplace assessment guidelines 6.8. Internal quality assurance 6.9. Internal and external accountability and auditing requirements 6.10. Training Regulation Standards 6.11. Safety Standards
7. Appropriate personnel/authorities	May include: 7.1. Appropriate personnel include: 7.2. Management 7.3. Line Staff
8. Feedback mechanisms	May include: 8.1. Feedback mechanisms include: 8.2. Verbal feedback 8.3. Informal feedback 8.4. Formal feedback 8.5. Questionnaire 8.6. Survey 8.7. Group discussion

EVIDENCE GUIDE

1. Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Set objectives 1.2. Planned and scheduled work activities 1.3. Implemented work plans 1.4. Monitored work activities 1.5. Reviewed and evaluated work plans and activities
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Tools, equipment and facilities appropriate to the proposed activities 2.2. Materials relevant to the proposed activities 2.3. Work plan schedules 2.4. Drawings, sketches or blueprint
3. Methods of Assessment	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Direct observation/questioning 3.2. Practical exercises on Planning and Scheduling Work Activities 3.3. Third Party Report (collection of competency evidence)
4. Context for Assessment	<ul style="list-style-type: none"> 4.1. Competency may be assessed in the workplace or in simulated work

UNIT OF COMPETENCY : PROMOTE ENVIRONMENTAL PROTECTION

UNIT CODE : 500311120

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required in adhering to environmental protection principles, strategies and guidelines

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Study guidelines for environmental concerns	1.1 Environmental legislations/ conventions and local ordinances are identified according to the different environmental aspects/impact 1.2 Industrial standard/ environmental practices are described according to the different environmental concerns	1.1. Features of an environmental management strategy 1.2. Environmental issues/concerns 1.3. International Environmental Protocols (Montreal, Kyoto) 1.4. Waste minimization hierarchy 1.5. Environmental planning/ management 1.6. Community needs and expectations 1.7. Resource availability 1.8. Environment-friendly/ environmental advocates 1.9. Sanitary Code 1.10. Environmental Code of practice	1.1. Communicating effectively 1.2. Performing research and analysis 1.3. Reading / interpreting data and information 1.4. Problem solving
2. Implement specific environmental programs	2.1 Programs/Activities are identified according to organizations policies and guidelines. 2.2 Individual roles/ responsibilities are determined and performed based on the activities identified. 2.3 Problems/ constraints encountered are resolved in accordance with organizations' policies and guidelines 2.4 Stakeholders are consulted based on company guidelines	2.1. Features of an environmental management strategy 2.2. Waste minimization hierarchy 2.3. Environmental planning/ management 2.4. Community needs and expectations 2.5. Resource availability 2.6. Environment-friendly/ environmental advocates 2.7. 5S of Good Housekeeping 2.8. 3Rs – Reduce, Reuse & Recycle	2.1. Communicating effectively 2.2. Performing research and analysis 2.3. Reading / interpreting data and information 2.4. Problem solving

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Monitor activities on environmental protection/ programs	3.1 Activities are periodically monitored and evaluated according to the objectives of the environmental program 3.2 Feedback from stakeholders are gathered and considered in proposing enhancements to the program based on consultations 3.3 Data gathered are analyzed based on evaluation requirements 3.4 Recommendations are submitted based on the findings 3.5 Management support systems are set/ established to sustain and enhance the program 3.6 Environmental incidents are monitored and reported to concerned/proper authorities	3.1. Features of an environmental management strategy 3.2. Environmental issues/concerns 3.3. International Environmental Protocols (Montreal, Kyoto) 3.4. Waste minimization hierarchy 3.5. Environmental planning/ management 3.6. Community needs and expectations 3.7. Resource availability 3.8. Environment-friendly/ environmental advocates 3.9. 5S of Good Housekeeping 3.10. 3Rs – Reduce, Reuse & Recycle 3.11. Sanitary Code 3.12. Environmental Code of practice	3.1. Communicating effectively 3.2. Performing research and analysis 3.3. Reading / interpreting data and information 3.4. Problem solving

RANGE OF VARIABLES

VARIABLE	RANGE
1. Legislations/ Conventions	May include: 1.1 Clean Air act 1.2 Clean Water Act 1.3 Solid Waste Management 1.4 Montreal Protocol 1.5 Kyoto Protocol
2. Environmental aspects/impacts	May include: 2.1 Air pollution 2.2 Water pollution 2.3 Noise pollution 2.4 Solid waste 2.5 Flood control 2.6 Deforestation/Denudation 2.7 Radiation/Nuclear /Radio Frequency/ Microwaves 2.8 Situation 2.9 Soil erosion (e.g. Quarrying, Mining, etc.) 2.10 Coral reef/marine life protection
3. Industrial standards/ Environmental practices	May include: 3.1 ECC standards 3.2 ISO standards 3.3 company environmental management systems (EMS)
4. Periodic	May include: 4.1 hourly 4.2 daily 4.3 weekly 4.4 monthly 4.5 quarterly 4.6 yearly
5. Programs/Activities	May include: 5.1 Waste disposal (on-site and off-site) 5.2 Repair and maintenance of equipment 5.3 Treatment and disposal operations 5.4 Clean-up activities 5.5 Laboratory and analytical test 5.6 Monitoring and evaluation 5.7 Environmental advocacy programs

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Demonstrated knowledge of environmental legislations and local ordinances according to the different environmental issues/concerns.</p> <p>1.2 Described industrial standard environmental practices according to the different environmental issues/concerns.</p> <p>1.3 Resolved problems/ constraints encountered based on management standard procedures</p> <p>1.4 Implemented and monitored environmental practices on a periodic basis as per company guidelines</p> <p>1.5 Recommended solutions for the improvement of the program</p> <p>1.6 Monitored and reported to proper authorities any environmental incidents</p>
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <p>2.1 Workplace/Assessment location</p> <p>2.2 Legislation, policies, procedures, protocols and local ordinances relating to environmental protection</p> <p>2.3 Case studies/scenarios relating to environmental protection</p>
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <p>3.1 Written/ Oral Examination</p> <p>3.2 Interview/Third Party Reports</p> <p>3.3 Portfolio (citations/awards from GOs and NGOs, certificate of training – local and abroad)</p> <p>3.4 Simulations and role-plays</p>
<p>4. Context for Assessment</p>	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA center.</p>

UNIT OF COMPETENCY : MANAGE INNOVATION AND CONTINUOUS IMPROVEMENT

UNIT CODE : 500311150

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to sustain and develop an environment in which improvement, innovation and learning are promoted and rewarded.

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Review programs, systems and processes	1.1. Strategies are established to monitor and evaluate performance and sustainability of key systems and processes 1.2. Undertake detailed analyses of supply chains, and operational, product and service delivery systems 1.3. Performance measures are Identified, and assessment tools and techniques, and evaluate their effectiveness 1.4. Performance reports and variance are analyzed from plans for key result areas of the organization 1.5. Changing trends and opportunities are Identified and analyzed relevant to the organization 1.6. Advice from specialists is seek, where appropriate, to identify technology and electronic commerce opportunities	1.1. Techniques in systems thinking and process 1.2. Basic Project Management Techniques 1.3. Principles of change management 1.4. Psychology of change management 1.5. techniques for recommending changes	1.1. Planning and implementing strategies 1.2. Analyzing, evaluating and integration of facts 1.3. Practicing analytical thinking 1.4. Demonstrating strategies and techniques in recommending changes and in managing changes in the workplace
2. Develop options for continuous improvement	2.1. Groups are briefed on performance improvement strategies and innovation as an essential element of competition 2.2. Creative climate and organizational learning are fostered by promoting interaction within and between work groups 2.3. New ideas and entrepreneurial behavior	2.1. Cost-benefit analysis method 2.2. Creativity and innovation theories and concepts 2.3. Quality management and continuous improvement theories 2.4. Practical Risk management concepts	2.1. Computing cost benefit 2.2. Practicing creativity and innovation 2.3. Applying continuous improvement 2.4. Applying risk management

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	<p>are encouraged, tested and recognized</p> <p>2.4. Failure of an idea are accepted during trialing and recognize, celebrate and embed success into systems</p> <p>2.5. Risk management and cost-benefit analysis are undertook for each option or idea approved for trial</p> <p>2.6. Innovations through agreed organizational processes are approved</p>		
3. Implement innovative processes	<p>3.1. Continuous improvement and sustainability are promoted as essential to doing business</p> <p>3.2. Impact of change and consequences are addressed for people and implement transition plans</p> <p>3.3. Objectives, timeframes, measures and communication plans are ensured in place to manage implementation</p> <p>3.4. Contingency plans in are implemented in the event of nonperformance</p> <p>3.5. Failure by prompt investigation and analysis are followed up of causes and managed emerging challenges and opportunities</p> <p>3.6. Learnings from activities are captured and managed to inform future work</p> <p>3.7. Continuous improvement are regularly evaluated systems and processes</p> <p>3.8. Costs and benefits of innovations and improvements are communicated to relevant groups and individuals</p>	<p>3.1. Knowledge management system</p> <p>3.2. Developing risk management techniques and control systems</p> <p>3.3. Evaluating impact of changes and developing action plans</p> <p>3.4. Techniques in implementing innovative change in the workplace</p>	<p>3.1. Applying knowledge management</p> <p>3.2. Describing best practices</p> <p>3.3. Demonstrating competence in evaluating extent of changes and efficacy of set action plans</p>

RANGE OF VARIABLES

VARIABLE	RANGE
1. Strategies	May include: 1.1 Recognizing own limitations 1.2 Referral to specialists 1.3 Utilizing techniques and aids 1.4 Providing written drafts 1.5 Verbal and non verbal communication

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Analyzed and evaluated systems and performance in key areas of the organization and identify opportunities for improvement, seeking advice from experts as appropriate 1.2 Promoted the value of creativity, innovation and sustainability and recognize successes 1.3 Supported the testing and trialing of new ideas and undertake risk management and cost-benefit analysis for options 1.4 Planned for and implemented improvements using organization’s processes for approvals, project management and change management 1.5 Facilitated effective contributions to and communications about continuous improvement and innovation 1.6 Captured insights, experiences and ideas for improvements and incorporate them into the organization’s knowledge management systems and future planning
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Pens 2.2 Note pads
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Interview 3.2 Written evaluation 3.3 Case analysis
<p>4. Context for Assessment</p>	<p>4.1 Competency may be assessed individually in actual workplace or simulation environment in TESDA accredited institutions.</p>

UNIT OF COMPETENCY : PERFORM HIGHER-ORDER THINKING PROCESSES AND APPLY TECHNIQUES IN THE WORKPLACE

UNIT CODE : 500311151

UNIT DESCRIPTOR : This unit of covers the knowledge, skills and attitudes required to use fundamental critical thinking skills in the workplace.

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Evaluate effectiveness and efficiency of the workplace systems, processes and procedures.	1.1. <i>Effectiveness and efficiency of workplace standards and procedures</i> are examined. 1.2. Usage of inquiry and dialogue to communicate evaluation measures and results are implemented. 1.3. Evaluation reports are prepared and communicated to team members.	1.1. Systems, standards, procedures and protocols in the workplace. 1.2. Different methods of critical and appreciative inquiry and their relevance to different situations 1.3. Techniques to assist in forming the habit of asking questions and taking responsibility for answers 1.4. Why questions are important and the benefits of asking good questions for individuals, businesses and communities (the importance of critical thinking).	1.1. Using range of analytical techniques (e.g., planning, attention, simultaneous and successive processing of information). 1.2. Communicating to actively listen and to ask questions of others in a constructive way. 1.3. Using critical thinking pathway to formulate and ask relevant questions and come up with appropriate answers. 1.4. Performing assimilation and accommodation skills to interpret and distil key information of relevance to a given situation. 1.5. Assessing and measuring the extent of effectiveness and efficiency of the systems, processes and procedures in the workplace.

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
<p>2. Foster the habit of critical inquiry and curiosity in the workplace.</p>	<p>2.1. Issues and situations are reflected on and wondered about.</p> <p>2.2. Issues and problems in the workplace particularly in the policies, procedures and protocols are discussed and evaluated between and among teams.</p> <p>2.3. Evaluation of efficiency and effectiveness of workplace policies, procedures and protocols are documented, communicated and agreed upon between and among teams.</p> <p>2.4. Growth mindset and positive relationship and communication is applied in the <i>context of critical inquiry and curiosity</i> in the workplace.</p>	<p>2.1. Different methods of critical and appreciative inquiry and their relevance to different situations.</p> <p>2.2. Techniques to assist in forming the habit of asking questions and taking responsibility for answers.</p> <p>2.3. Why questions are important and the benefits of asking good questions for individuals, businesses and communities (the importance of critical thinking).</p> <p>2.4. Growth mindset and positive communication and relationship strategies and techniques.</p>	<p>2.1. Using range of analytical techniques (e.g., planning, attention, simultaneous and successive processing of information).</p> <p>2.2. Communicating to actively listen and to ask questions of others in a constructive way.</p> <p>2.3. Using critical thinking pathway to formulate and ask relevant questions and come up with appropriate answers.</p> <p>2.4. Performing assimilation and accommodation skills to interpret and distil key information of relevance to a given situation.</p> <p>2.5. Assessing and measuring the extent of effectiveness and efficiency of the systems, processes and procedures in the workplace.</p> <p>2.6. Communicating insights on workplace effectiveness and efficiency.</p>

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Develop practical action plans for improving workplace conditions.	3.1. Evaluation of efficiency and effectiveness of workplace policies, procedures and protocols are documented and communicated to stakeholders. 3.2. Practical action plans in improving workplace conditions are formulated, presented and negotiated with stakeholders. 3.3. Proposed changes and directions are inquired, processed and negotiated between and among teams, and stakeholders as well of the organization. 3.4. Commitment to continuous improvement and change is highlighted. 3.5. Passion and dedication for changing and adapting to the demands of the 21 st century workplace are considered.	3.1. Different methods of critical and appreciative inquiry and their relevance to different situations. 3.2. Techniques to assist in forming the habit of asking questions and taking responsibility for answers. 3.3. Why questions are important and the benefits of asking good questions for individuals, businesses and communities (the importance of critical thinking). 3.4. Growth mindset and positive communication and relationship strategies and techniques. 3.5. Creative negotiation skills. 3.6. Change management and continuous improvement concepts.	3.1. Using range of analytical techniques (e.g., planning, attention, simultaneous and successive processing of information). 3.2. Communicating to actively listen and to ask questions of others in a constructive way. 3.3. Using critical thinking pathway to formulate and ask relevant questions and come up with appropriate answers. 3.4. Performing assimilation and accommodation skills to interpret and distil key information of relevance to a given situation. 3.5. Assessing and measuring the extent of effectiveness and efficiency of the systems, processes and procedures in the workplace. 3.6. Communicating practical insights on improving workplace conditions.

RANGE OF VARIABLES

VARIABLE	RANGE
1. Effectiveness and efficiency of workplace standards and procedures	May include; <ol style="list-style-type: none"> 1.1. Developing a more efficient way of doing something 1.2. Developing a new idea 1.3. Developing and improving products and services 1.4. Enhancing skills and career opportunities 1.5. Enhancing the physical environment 1.6. Financial benefit 1.7. Greater personal satisfaction 1.8. Improving interpersonal relationships 1.9. Evaluating overall workplace conditions
2. Context of critical inquiry and curiosity	May include: <ol style="list-style-type: none"> 2.1. Accuracy 2.2. Breadth 2.3. Clarity 2.4. Depth 2.5. Emotion 2.6. Fairness 2.7. Logic 2.8. Meaning 2.9. Planning 2.10. Attention 2.11. Precision 2.12. Relevance 2.13. Significance 2.14. Social engagement 2.15. Society 2.16. Style 2.17. Growth mindset 2.18. Positive communication 2.19. Positive negotiation 2.20. Workplace conditions 2.21. Appreciative inquiry methods

VARIABLE	RANGE
<p>3. Practical action plans for improving workplace conditions.</p>	<p>May include:</p> <ul style="list-style-type: none"> 3.1. Insights on continuous improvement 3.2. Creative strategies and techniques for becoming better at work and real life 3.3. Career plans 3.4. Challenging workplace policies, procedures and protocols 3.5. Specifying plans for change and adapting to the demands of the contemporary workforce 3.6. Challenges in negotiating with stakeholders and teams 3.7. Change management, innovation and knowledge creation 3.8. Contractual agreements 3.9. Extreme time pressure or non-negotiable deadlines 3.10. Financial limitations 3.11. Procedures determined by laws or other regulations 3.12. Safety issues 3.13. When others are totally closed to new ideas 3.14. acknowledging shared responsibility 3.15. adopting a positive 'can do' attitude 3.16. following up on practical details 3.17. pro-actively seeking information 3.18. suggesting a new approach 3.19. talking to others about possible answers 3.20. constraints of the broader context and environment 3.21. overall goal - what needs to be achieved 3.22. personal hopes and expectations

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Evaluated the effectiveness and efficiency of workplace systems, processes and procedures.</p> <p>1.2 Fostered the habit of critical inquiry and curiosity in the workplace</p> <p>1.3 Shown a thorough knowledge and understanding of how critical thinking impacts on individual lives, the broader community and work situations.</p> <p>1.4 Developed practical action plans for improving workplace conditions.</p>
<p>2. Resource Implications</p>	<p>2.1. Interactions with specific challenges and situations to demonstrate the application of critical thinking (this would usually involve interactions with others).</p>
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <p>3.1 Direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance by the candidate</p> <p>3.2 Evaluation of a candidate blog exploring different ideas and questions</p> <p>3.3 Review of candidate response to scenarios that allow the candidate to apply critical thinking techniques to a life or work situation, and to demonstrate ability to portray curiosity and exploration of new concepts</p> <p>3.4 Evaluation of candidate response to the challenge of adopting different perspectives on a situation, and ability to both develop and respond to questions from those perspectives</p> <p>3.5 Observation of the candidate participating in a group problem-solving session</p> <p>3.6 Oral or written questioning to assess knowledge of typical blockers to the critical thinking process.</p> <p>3.7 Life Narrative Inquiry to reflect life stories that reflect how critical thinking and problem solving is applied in the lives.</p>
<p>4. Context for Assessment</p>	<p>4.1. In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.</p>

UNIT TITLE : **LEAD IN IMPLEMENTATION OF OCCUPATIONAL SAFETY AND HEALTH (OSH) PROGRAM, PROCEDURES AND POLICIES/GUIDELINES**

UNIT CODE : **5003111255**

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to lead the implementation of workplace's safety and health program, procedures and policies/guidelines.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify workplace hazards and risk	1.1. Hazards in the workplace and/or its indicators of its presence are identified 1.2. Evaluation and/or work environment measurements of OSH hazards/risk existing in the workplace is conducted by authorized personnel or agency 1.3. OHS issues and/or concerns raised by workers are gathered	1.1. General OSH Principles 1.2. Occupational hazards/risks recognition 1.3. OSH organizations providing services on OSH evaluation and/or work environment measurements (WEM) 1.4. National OSH regulations; company OSH policies and protocols 1.5. Systematic gathering of OSH issues and concerns	1.1. Reading skills required to interpret work instruction 1.2. Critical thinking 1.3. Interpreting work instructions
2. Identify and implement appropriate control measures	2.1. Prevention and control measures , including use of PPE (personal protective equipment) for specific hazards identified and implemented 2.2. Appropriate risk controls based on result of OSH hazard evaluation is recommended 2.3. Contingency measures , including emergency procedures during workplace incidents and emergencies are recognized and established in accordance with organization procedures	2.1. General OSH Principles 2.2. Appropriate prevention and control measures for specific hazards 2.3. Hierarchy of risk controls 2.4. Familiarity on contingency measures established in the workplace	2.1. Knowledge management 2.2. Analytic skills 2.3. Critical thinking skills 2.4. Coordinating skills 2.5. Communication skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Implement OSH programs, procedures and policies/guidelines	3.1. Information to work team about company OHS program, procedures and policies/guidelines are provided 3.2. Implementation of OSH procedures and policies/guidelines are participated 3.3. Team members are trained and advised on OSH standards and procedures 3.4. Procedures for maintaining OSH-related records are implemented	3.1. General OSH principles 3.2. National OSH regulations 3.3. Company OSH and recording protocols, procedures and policies/guidelines 3.4. Training and/or counselling methodologies and strategies	3.1. Knowledge management 3.2. Interpersonal skills 3.3. Coordinating skills 3.4. Communication skills 3.5. Troubleshooting skills 3.6. Presentation skills 3.7. Training skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Hazards	May include but are not limited to: <ol style="list-style-type: none"> 1.1. Physical hazards – impact, illumination, pressure, noise, vibration, extreme temperature, radiation 1.2. Biological hazards- bacteria, viruses, plants, parasites, mites, molds, fungi, insects 1.3. Chemical hazards – dusts, fibers, mists, fumes, smoke, gasses, vapors 1.4. Ergonomics <ol style="list-style-type: none"> 1.4.1. Psychological factors – over exertion/ excessive force, awkward/static positions, fatigue, direct pressure, varying metabolic cycles 1.4.2. Physiological factors – monotony, personal relationship, work out cycle 1.5. Safety hazards (unsafe workplace condition) – confined space, excavations, falling objects, gas leaks, electrical, poor storage of materials and waste, spillage, waste and debris 1.6. Unsafe workers’ act (Smoking in off-limited areas, Substance and alcohol abuse at work)
2. Indicators	May include but not limited to: <ol style="list-style-type: none"> 2.1. Increased of incidents of accidents, injuries 2.2. Increased occurrence of sickness or health complaints/symptoms 2.3. Common complaints of workers’ related to OSH 2.4. High absenteeism for work-related reasons
3. Evaluation and/or work environment measurements	May include but not limited to <ol style="list-style-type: none"> 3.1. Health Audit 3.2. Safety Audit 3.3. Work Safety and Health Evaluation 3.4. Work Environment Measurements of Physical and Chemical Hazards
4. OHS issues and/or concerns	May include but not limited to <ol style="list-style-type: none"> 4.1. Workers’ experience/observance on presence of work hazards 4.2. Unsafe/unhealthy administrative arrangements (prolonged work hours, no breaktime, constant overtime, scheduling of tasks) 4.3. Reasons for compliance/non-compliance to use of PPEs or other OSH procedures/policies/ guidelines
5. Prevention and control measures	May include but are not limited to: <ol style="list-style-type: none"> 5.1. Eliminate the hazard (i.e., get rid of the dangerous machine) 5.2. Isolate the hazard (i.e. keep the machine in a closed room and operate it remotely; barricade an unsafe area off) 5.3. Substitute the hazard with a safer alternative (i.e., replace the machine with a safer one) 5.4. Use administrative controls to reduce the risk (i.e. give trainings on how to use equipment safely; OSH-related topics, issue warning signages, rotation/shifting work)

VARIABLE	RANGE
	<p>schedule)</p> <p>5.5. Use engineering controls to reduce the risk (i.e. use safety guards to machine)</p> <p>5.6. Use personal protective equipment</p> <p>5.7. Safety, Health and Work Environment Evaluation</p> <p>5.8. Periodic and/or special medical examinations of workers</p>
<p>6. Safety gears /PPE (Personal Protective Equipments)</p>	<p>May include but are not limited to:</p> <p>6.1. Arm/Hand guard, gloves</p> <p>6.2. Eye protection (goggles, shield)</p> <p>6.3. Hearing protection (ear muffs, ear plugs)</p> <p>6.4. Hair Net/cap/bonnet</p> <p>6.5. Hard hat</p> <p>6.6. Face protection (mask, shield)</p> <p>6.7. Apron/Gown/coverall/jump suit</p> <p>6.8. Anti-static suits</p> <p>6.9. High-visibility reflective vest</p>
<p>7. Appropriate risk controls</p>	<p>Appropriate risk controls in order of impact are as follows:</p> <p>7.1. Eliminate the hazard altogether (i.e., get rid of the dangerous machine)</p> <p>7.2. Isolate the hazard from anyone who could be harmed (i.e., keep the machine in a closed room and operate it remotely; barricade an unsafe area off)</p> <p>7.3. Substitute the hazard with a safer alternative (i.e., replace the machine with a safer one)</p> <p>7.4. Use administrative controls to reduce the risk (i.e., train workers how to use equipment safely; train workers about the risks of harassment; issue signage)</p> <p>7.5. Use engineering controls to reduce the risk (i.e., attach guards to the machine to protect users)</p> <p>7.6. Use personal protective equipment (i.e., wear gloves and goggles when using the machine)</p>
<p>8. Contingency measures</p>	<p>May include but are not limited to:</p> <p>8.1. Evacuation</p> <p>8.2. Isolation</p> <p>8.3. Decontamination</p> <p>8.4. (Calling designed) emergency personnel</p>
<p>9. Emergency procedures</p>	<p>May include but are not limited to:</p> <p>9.1. Fire drill</p> <p>9.2. Earthquake drill</p> <p>9.3. Basic life support/CPR</p> <p>9.4. First aid</p> <p>9.5. Spillage control</p> <p>9.6. Decontamination of chemical and toxic</p> <p>9.7. Disaster preparedness/management</p> <p>9.8. Use of fire-extinguisher</p>

VARIABLE	RANGE
10. Incidents and emergencies	May include but are not limited to: 10.1. Chemical spills 10.2. Equipment/vehicle accidents 10.3. Explosion 10.4. Fire 10.5. Gas leak 10.6. Injury to personnel 10.7. Structural collapse 10.8. Toxic and/or flammable vapors emission
11. OSH-related Records	May include but are not limited to: 11.1. Medical/Health records 11.2. Incident/accident reports 11.3. Sickness notifications/sick leave application 11.4. OHS-related trainings obtained

EVIDENCE GUIDE

<p>1. Critical aspect of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1. Identifies hazards/risks in the workplace and/or its indicators 1.2. Requests for evaluation and/or work environment measurements of OSH hazards/risk in the workplace 1.3. Gathers OSH issues and/or concerns raised by workers 1.4. Identifies and implements prevention and control measures, including use of PPE (personal protective equipment) for specific hazards 1.5. Recommends appropriate risk controls based on result of OSH hazard evaluation and OSH issues gathered 1.6. Establish contingency measures, including emergency procedures in accordance with organization procedures 1.7. Provides information to work team about company OHS program, procedures and policies/guidelines 1.8. Participates in the implementation of OSH procedures and policies/guidelines 1.9. Trains and advises team members on OSH standards and procedures 1.10. Implements procedures for maintaining OSH-related records
<p>2. Resource implication</p>	<p>The following resources should be provided:</p> <ol style="list-style-type: none"> 2.1. Workplace or assessment location 2.2. OHS personal records 2.3. PPE 2.4. Health records
<p>3. Method of assessment</p>	<p>Competency in this unit may be assessed through:</p> <ol style="list-style-type: none"> 3.1. Portfolio Assessment 3.2. Interview 3.3. Case Study/Situation 3.4. Observation/Demonstration and oral questioning
<p>4. Context of Assessment</p>	<p>4.1. Competency may be assessed in the work place or in a simulated work place setting</p>

COMMON COMPETENCIES

UNIT OF COMPETENCY : **PREPARE CONSTRUCTION MATERIALS AND TOOLS**

UNIT CODE : **CON931201**

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes on identifying, requesting and receiving construction materials and tools in various workplace settings.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variable</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify materials	1.1 Materials are identified as per job requirements 1.2 Quantity and <i>description of materials and tools</i> conform with the job requirements 1.3 Tools and accessories are identified according to job requirements	1.1 Different work specifications 1.2 Types and uses of Masonry tools and accessories	1.1 Identifying tools and accessories according to the job requirements
2. Prepare requisition of materials	2.1 <i>Materials and tools</i> needed are requested according to the identified requirements 2.2 Request is done as per <i>company standard operating procedures (SOP)</i> 2.3 Substitute materials and tools are provided without sacrificing cost and quality of work	2.1 Work requirements 2.2 Types and uses of Masonry tools and accessories 2.3 Material take-off 2.4 Requisition procedures	2.1 Preparing material take-off 2.2 Requesting materials and tools
3. Receive and inspect materials	3.1 Materials and tools issued are inspected as per quantity and specification 3.2 Tools, accessories and materials are checked 3.3 Materials and tools are set aside to appropriate location	3.1 Policy on receiving material deliveries 3.2 Material and tools quality and defects 3.3 Material handling	3.1 Checking and inspecting materials and tools 3.2 Storing/ stacking of tool and materials

RANGE OF VARIABLES

VARIABLE	RANGE
1. Description of materials and tools	May include: 1.1 Brand name 1.2 Size 1.3 Capacity 1.4 Kind of application
2. Tools and accessories	May include: 2.1 Electrical supplies 2.2 Mechanical supplies 2.3 Cleaning supplies
3. Company standard operating procedures	May include: 3.1 Job order 3.2 Requisition slip 3.3 Borrower slip

EVIDENCE GUIDE

1. Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Listed materials and tools according to quantity and job requirements 1.2 Requested materials and tools according to the list prepared and as per company SOP 1.3 Inspected issued materials and tools as per quantity and job specifications 1.4 Provided tools with safety devices
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Workplace location 2.2 Materials relevant to the unit of competency 2.3 Plans, drawings and specifications relevant to the activities
3. Methods of Assessment	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Direct observation/Demonstration with oral questioning
4. Context of Assessment	<ul style="list-style-type: none"> 4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center

UNIT OF COMPETENCY : **OBSERVE PROCEDURES, SPECIFICATIONS AND MANUALS OF INSTRUCTIONS**

UNIT CODE : **CON311201**

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes on identifying, interpreting, applying services to specifications and manuals and storing manuals.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify and access specification/ manuals	1.1 Appropriate manuals are identified and accessed as per job requirements 1.2 Version and date of manual are checked to ensure that correct specification and procedures are identified	1.1 Types of manuals used in Masonry 1.2 Identification of symbols used in the manuals	1.1 Identifying manuals and specifications 1.2 Accessing information and data
2. Interpret manuals	2.1 Relevant sections, chapters of specifications/ manuals are located in relation to the work to be conducted 2.2 Information and procedure in the manual are interpreted in accordance with industry practices	2.1 Types of manuals used in Masonry 2.2 Types of symbols used in manuals 2.3 System of measurements 2.4 Unit conversion	2.1 Interpreting symbols and specifications 2.2 Accessing information and data 2.3 Applying conversion of units of measurements

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Apply information in manual	3.1 Manual is interpreted according to job requirements 3.2 Work steps are correctly identified in accordance with manufacturer's specification 3.3 Manual data are applied according to the given task 3.4 All correct sequencing and adjustments are interpreted in accordance with information contained on the manual or specifications	3.1 Types of manuals used in Masonry 3.2 Types and application of symbols in manuals 3.3 Unit conversion	3.1 Applying information from manuals
4. Store manuals	4.1 Manual or specification is stored appropriately to prevent damage, ready access and updating of information when required in accordance with company requirements	4.1 Types of manuals used in Masonry 4.2 Manual storing and maintaining procedures	4.1 Storing and maintaining manuals

RANGE OF VARIABLES

VARIABLE	RANGE
1. Manual	May include: 1.1 Manufacturer's Specification Manual 1.2 Maintenance Procedure Manual 1.3 Periodic Maintenance Manual

EVIDENCE GUIDE

1. Critical aspects of competency	Assessment requires that the candidate: 1.1 Identified and accessed specification/manuals as per job requirements 1.2 Interpreted manuals in accordance with industry practices 1.3 Applied information in manuals according to the given task 1.4 Stored manuals in accordance with company requirements
2. Resource implications	The following resources should be provided: 2.1 All manuals/catalogues relative to construction sector
3. Methods of assessment	Competency in this unit may be assessed through: 3.1 Direct observation/Demonstration with Oral Questioning
4. Context of assessment	4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center

UNIT OF COMPETENCY : INTERPRET DRAWINGS AND PLANS

UNIT CODE : CON311202

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes in analyzing and interpreting symbols, data and work plan based on the required performance standards.

ELEMENTS	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Analyze signs, symbols and data	1.1 Signs, symbols and data are identified according to job specifications 1.2 Signs, symbols and data are determined according to site regulations	1.1 Signs and symbols 1.2 Rules and regulations	1.1 Interpreting working drawing
2. Interpret drawings and plans	2.1 Necessary tools and materials are identified according to the work plan 2.2 Supplies and materials are listed according to specifications 2.3 Components, assemblies or objects are recognized as required 2.4 Dimensions are identified as appropriate to the plan 2.5 Specification details are matched with existing/available resources and in line with job requirements	1.1 Systems of measurement 1.2 Linear measurement 1.3 Dimension 1.4 Unit conversion	2.1 Interpreting drawing 2.2 Matching specification details with existing resources

RANGE OF VARIABLES

VARIABLE	RANGE
1. Signs and symbols	May include: 1.1 Speed limit 1.2 Direction/Road 1.3 Warnings
2. Site regulations	May include: 2.1 Instructions 2.2 Signages 2.3 Work schedules 2.4 Work bulletin boards 2.5 Charts 2.6 Memos 2.7 Site Map 2.8 Emergency response plan 2.9 Permits
3. Tools and materials	May include: 3.1 Rulers 3.2 Protractor 3.3 Steel tape 3.4 Calculator 3.5 Pencil
4. Work plan	May include: 4.1 Job requirements 4.2 Installation instructions 4.3 Components instruction

EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires that the candidate:</p> <p>1.1 Identified and determined signs, symbols and data according to work plan and job requirements</p> <p>1.2 Identified tools and materials in accordance with job requirements</p> <p>1.3 Demonstrated ability to determine job specifications based on working drawing</p>
2. Resource Implications	<p>The following resources should be provided:</p> <p>2.1 Workplace</p> <p>2.2 Drawings and specification relevant to task</p> <p>2.3 Materials and instrument relevant to proposed activity</p>
3. Methods of Assessment	<p>Competency in this unit may be assessed through:</p> <p>3.1 Direct observation/Demonstration with Oral Questioning</p> <p>3.2 Written Examination</p>
4. Context of Assessment	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center.</p>

UNIT OF COMPETENCY : PERFORM MENSURATIONS AND CALCULATIONS

UNIT CODE : CON311203

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes on identifying and measuring objects based on the required performance standards.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variable</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Select measuring instruments	1.1 Object or component to be measured is identified, classified and interpreted according to the appropriate regular geometric shape 1.2 Measuring tools are selected/identified as per object to be measured or job requirements 1.3 Correct specifications are obtained from relevant sources 1.4 Measuring instruments are selected according to job requirements 1.5 Alternative measuring tools are used without sacrificing cost and quality of work	1.1 Types of measuring tools and its uses	1.1 Selecting measuring instruments

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variable	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Carry out measurements and calculations	2.1 Measurements are obtained according to job requirements 2.2 Alternative measuring tools are used without sacrificing cost and quality of work 2.3 Calculations needed to complete work tasks are performed using the four basic process of addition (+), subtraction (-), multiplication (x) and division (/) 2.4 Calculations involving fractions, percentages and mixed numbers are used to complete workplace tasks 2.5 Numerical computation is self-checked and corrected for accuracy 2.6 Instruments are read to the limit of accuracy of the tool 2.7 Systems of measurement identified and converted according to job requirements/ISO 2.8 Workpieces are measured according to job requirements	2.1 Linear measurement 2.2 Unit conversion 2.3 Ratio and proportion 2.4 Area	2.1 Interpreting formulas for volume, areas, perimeters of plane and geometric figures 2.2 Handling of measuring instruments

RANGE OF VARIABLES

VARIABLE	RANGE
1. Geometric shape	May include: 1.1 Round 1.2 Square 1.3 Rectangular 1.4 Triangle 1.5 Sphere 1.6 Conical
2. Measuring instruments	May include: 2.1 Micrometer (In-out, depth) 2.2 Vernier caliper (out, inside) 2.3 Thickness gauge 2.4 Torque gauge 2.5 Small hole gauge 2.6 Try-square 2.7 Protractor 2.8 Steel ruler 2.9 Voltmeter 2.10 Ammeter 2.11 Gauges 2.12 Thermometers
3. Measurements and calculations	May include: 3.1 Linear 3.2 Volume 3.3 Area 3.4 Wattage 3.5 Voltage 3.6 Amperage 3.7 Inside diameter 3.8 Length 3.9 Thickness 3.10 Outside diameter 3.11 Density

EVIDENCE GUIDE

1. Critical aspects of competency	<p>Assessment requires that the candidate:</p> <p>1.1 Selected and prepared appropriate measuring instruments in accordance with job requirements</p> <p>1.2 Performed measurements and calculations according to job requirements/ ISO</p>
2. Resource implications	<p>The following resources should be provided:</p> <p>2.1 Workplace location</p> <p>2.2 Problems to solve</p> <p>2.3 Measuring instrument appropriate to carry out tasks</p> <p>2.4 Instructional materials relevant to the propose activity</p>
3. Methods of assessment	<p>Competency in this unit may be assessed through:</p> <p>3.1 Direct observation/Demonstration with Oral Questioning</p>
4. Context of assessment	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center</p>

UNIT OF COMPETENCY : **MAINTAIN TOOLS AND EQUIPMENT**

UNIT CODE : **CON311204**

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes on checking condition, performing preventive maintenance and storing of construction painting tools and equipment.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Check condition of tools and equipment	1.1 Materials, tools and equipment are identified according to classification and job requirements 1.2 Non-functional tools and equipment are segregated and labeled according to classification 1.3 Safety of tools and equipment are observed in accordance with manufacturer's instructions 1.4 Condition of Personal Protective Equipment (PPE) are checked in accordance with manufacturer's instructions	1.1 Use of PPE 1.2 Handling of tools and equipment 1.3 Good housekeeping 1.4 Types and uses of lubricants 1.5 Types and uses of cleaning materials	1.1 Maintaining tools and equipment 1.2 Handling of tools and equipment 1.3 Identifying tools and equipment defects

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Perform basic preventive maintenance	2.1 Appropriate lubricants are identified according to types of equipment 2.2 Tools and equipment are lubricated according to preventive maintenance schedule or manufacturer's specifications 2.3 Measuring instruments are checked and calibrated in accordance with manufacturer's instructions 2.4 Tools are cleaned and lubricated according to standard procedures 2.5 Defective instruments, equipment and accessories are inspected and replaced according to manufacturer's specifications 2.6 Tools are inspected, repaired and replaced after use 2.7 Work place is cleaned and kept in safe state in line with Occupational Safety and Health (OSHS)	2.1 Use of PPE 2.2 Handling of tools and equipment 2.3 Good housekeeping 2.4 Types and uses of lubricants 2.5 Types and uses of cleaning materials 2.6 Methods and techniques 2.7 Procedures	2.1 Handling of tools and equipment 2.2 Performing preventive maintenance

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Store tools and equipment	3.1 Inventory of tools, instruments and equipment are conducted and recorded as per company practices 3.2 Tools and equipment are stored safely in appropriate locations in accordance with manufacturer's specifications or company procedures	3.1 Use of PPE 3.2 Handling of tools and equipment 3.3 Storing procedures and techniques 3.4 Storage conditions/ locations	3.1 Storing tools and equipment 3.2 Handling of tools and equipment

RANGE OF VARIABLES

VARIABLE	RANGE
1. Materials	May include: 1.1 Lubricants 1.2 Cleaning materials 1.3 Rust remover 1.4 Rugs 1.5 Spare parts
2. Tools and equipment	May include: 2.1 Tools Cutting tools - hacksaw, crosscut saw Boring tools - brace, hand drill Holding tools - vise grip, C-clamp, bench vise Threading tools - die and stock, taps 2.2 Measuring instruments/equipment
3. Personal Protective Equipment (PPE)	May include: 3.1 Goggles 3.2 Gloves 3.3 Safety shoes 3.4 Hard hat 3.5 Reflectorized Vest

EVIDENCE GUIDE

<p>1. Critical aspects of competency</p>	<p>Assessment requires that the candidate:</p> <ul style="list-style-type: none"> 1.1 Selected and used appropriate processes, tools and equipment to carry out task 1.2 Identified functional and non-functional tools and equipment 1.3 Checked, lubricated and calibrated tools, equipment and instruments according to manufacturer’s specifications 1.4 Replaced defective tools, equipment and their accessories 1.5 Observed and applied safe handling of tools and equipment and safety work practices 1.6 Prepared and submitted inventory report, where applicable 1.7 Maintained workplace in accordance with OSHA regulations 1.8 Stored tools and equipment safely in appropriate locations and in accordance with company practices
<p>2. Resource implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Workplace 2.2 Maintenance schedule 2.3 Maintenance materials, tools and equipment relevant to the proposed activity/task
<p>3. Methods of assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Direct observation/Demonstration with Oral Questioning 3.2 Written Examination
<p>4. Context of assessment</p>	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center.</p>

CORE COMPETENCIES

UNIT OF COMPETENCY : PLAN AND ORGANIZE WORK ACTIVITIES

UNIT CODE : CON312337

UNIT DESCRIPTOR : This unit covers the knowledge, skills, and attitudes in planning and organizing construction work activities.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Interpret of relevant Contract and Legal Constraints	1.1. Relevant information are identified based on <i>Contract documents</i> and <i>Work Strategies</i> 1.2. Work interface are identified based on Contract documents and Site Strategies 1.3. Contract variations are identified based on Contract documents and Site Strategies	1.1 Contract Document Type 1.2 Contract Parts 1.3 Types of Contract 1.4 Technical & Commercial Aspect of a contract 1.5 Legal Terms in Contract	1.1. Creative Thinking Skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Plan & Organize Work Group Activities based on Master Schedule	2.1. Detail Construction Work Schedule is formulated based on Master Schedule 2.2. Technical and Commercial Concerns are communicated to appropriate stakeholder in accordance with company and client's policies and procedures 2.3. Correspondences are prepared in accordance with company and client's policies and procedures	2.1. Detailed Construction Schedule 2.2. Work Scheduling Concepts 2.3. Construction Work Activities 2.4. Construction Stakeholders 2.5. Plans & Specifications	2.1. Utilize Scheduling Techniques and Software 2.2. Translate Strategies into Operational Plans
3. Delegate tasks	3.1. Site Strategies are described in accordance with company and client's policies and procedures 3.2. Workloads are distributed in accordance with company and client's policies and procedures 3.3. Milestones are established based on Contract Documents and Site Strategies	3.1 Construction Work Methodology 3.2 Resource Loading	3.1. Can communicate with tact

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
4. Allocate Resources	4.1 Required resources are identified based on Contract documents and Site Strategies* 4.2 Bill of materials are estimated based on Contract documents and Site Strategies* 4.3 Logistical requirements are managed based on company and client's policies and procedures	4.1 Construction Materials 4.2 Supply Chain	4.1. Specification Identification 4.2. Estimating 4.3. Coordination Skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Contract Documents	May include: <ul style="list-style-type: none"> 1.1 Bid Plans 1.2 For Construction Drawings 1.3 Commercial Contracts 1.4 Technical Contracts 1.5 Owner's Instructions 1.6 Project Manager's Instructions 1.7 Milestone Construction Schedule 1.8 Technical Specifications 1.9 Plans and Specifications 1.10 An inspection Checklist 1.11 Responses to Design Development 1.12 All approvals and permits required of other state or regulatory agencies 1.13 Shop Drawings 1.14 Location Map 1.15 Building Code Information 1.16 Terms and Abbreviation Index and Symbol Legend 1.17 Project Description 1.18 Designers 1.19 Major Sub-contractor categories 1.20 Description of any Unit Prices 1.21 Base Bid 1.22 Testing and Product Submittals 1.23 Description of any Phasing or Special Work Conditions 1.24 Pre-Construction Plan
2. Work Strategies	May include: <ul style="list-style-type: none"> 2.1 Construction Objectives, 2.2 Budgeted Resources 2.3 Project Limitations 2.4 Pre-Construction Planning 2.5 Plan of Activities 2.6 Work Methods 2.7 Company Vision, Mission and Values 2.8 Strategic Planning 2.9 Legal Requirements 2.10 Government Compliance 2.11 Client's Rules

VARIABLE	RANGE
3. Technical and Commercial Concerns	May include: 3.1. Organizing Work for Construction 3.2. Design and Construction Process 3.3. Labor, Material and Equipment Utilization 3.4. Cost Estimation 3.5. Construction Facilities 3.6. Construction Planning 3.7. Scheduling Procedures 3.8. Advanced Scheduling Techniques 3.9. Quality Control and Safety during Construction 3.10. Use of Construction Information
4. Company and client's policies and procedures	May include: 4.1. Project filing 4.2. Pre/Construction Meeting 4.3. Notice to Proceed (NTP) 4.4. Pre-Construction Inspections 4.5. Inspection Procedures 4.6. Documentation Procedures 4.7. Non-Conformance Report 4.8. Final Inspection and Acceptance 4.9. As-Built 4.10. Pay Estimates/Billing 4.11. Payment 4.12. Miscellaneous Instructions 4.13. Method Statement 4.14. Contract Administration 4.15. Change Orders 4.16. Substantial Completion 4.17. Final Inspection 4.18. Close-out Documents 4.19. Warranty Expiration & Tracking of Warranty & Insurance Expirations 4.20. Final Payment 4.21. Project Completion Report 4.22. Required Client's Forms
5. Correspondences	May include: 5.1. Project Correspondences 5.2. Technical Correspondences 5.3. Request for Information 5.4. Coordination Letters 5.5. Request Letters 5.6. Change Orders and Change Order Logs 5.7. Plans, Specifications, Shop Drawings, Requests for Information and Submittals 5.8. Job Cost Report and Estimates 5.9. Photograph and Videos

VARIABLE	RANGE
6. Required Resources	May include: 6.1. Manpower 6.2. Materials and hand tools 6.3. Equipment 6.4. Working drawings 6.5. Sketches/ Shop drawings 6.6. Work instruction 6.7. Schedules 6.8. Materials and Equipment supplied by the Contractor 6.9. Owner's Supplied 6.10. Applicable Construction Methodology 6.11. Supplier /Sub-Contractor/Provider
7. Logistical Requirements	May include: 7.1. Warehouses Requirements 7.2. Field Warehouses 7.3. Policies and Procedures (Management, health and safety, record keeping and reporting) 7.4. Space Utilization and Handling Requirements 7.5. Storage and Lay-out Requirements 7.6. Transportation Requirements (Shipping/Airfare or by Land) 7.7. Legal Considerations 7.8. Stock Inventory, Control and Movement 7.9. Managing Warehouse Operations

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Identified relevant information based on contract documents and site strategies 1.2 Identified contract variations based on contract documents and site strategies 1.3 Formulated a Detailed Construction Work Schedule based on Master Schedule 1.4 Prepared correspondences in accordance with company and client's policies and procedures 1.5 Distributed workloads in accordance with company and client's policies and procedures 1.6 Establish milestones in accordance with company and client's policies and procedures 1.7 Identified required resources based on contract documents and site strategies 1.8 Estimated bill of materials based on contract documents and site strategies
<p>3. Resource implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Workplace 2.2 Relevant Tools, Materials, Construction Documents, Forms and Records
<p>4. Method of assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Written-Examination 3.2 Direct observation / 3.3. Portfolio with Interview 3.4. Case Study 3.5. Third Party Report
<p>5. Context for assessment</p>	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center</p>

UNIT OF COMPETENCY : RESOLVE CONSTRUCTION WORK RELATE ISSUES

UNIT CODE : CON312338

UNIT DESCRIPTOR : This unit covers the knowledge, skills, and attitudes in resolving construction work related issues.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Analyze Work Issues	1.1. Construction Work Issues are determined based on Contract documents, Work Strategies and Site Conditions 1.2. Construction Work Issues are investigated in accordance with company and client's policies and procedures 1.3. Stakeholder's interest are identified in accordance with company and client's policies and procedures	1.1. Construction Work Issues 1.2. Problem Solving Techniques 1.3. Stakeholders in Construction	1.1. Critical Thinking 1.2. Ability to listen 1.3. Problem Solving Skills

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Assess solutions to work issues	2.1. Construction work issues urgency are determined in accordance with company and client's policies and procedures 2.2. Controls are identified in accordance with company and client's policies and procedures 2.3. Controls are evaluated based on Contract Documents, Site Strategies and Site Conditions	2.1 Risk Analysis 2.2 Decision Analysis Process 2.3 Site Construction Controls	2.1. Complex Problem Solving 2.2. Decision Making Skills
3. Propose Solutions	3.1 Controls are recommended to appropriate stakeholder in accordance with company and client's policies and procedures 3.2 Work activities are updated based on approved action plans 3.3 Action plans are communicated in accordance with company and client's policies and procedures	3.1 Policies and Procedures in Preparation of Recommendation	3.1 Can anticipate problems 3.2 Persuasion Skills 3.3 Report/ Recommendation Writing Skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Construction Work Issues	May include: 1.1. Problems, 1.2. Causes and Effects 1.3. Hazards and Solutions 1.4. Scaffolding, Ladders and Fall Protection 1.5. Trenching Risks 1.6. Communication Barriers 1.7. Safety, Health and Environment Issues 1.8. Heavy Equipment Operations Safety Issues 1.9. Incorrect specifications 1.10. Old set of plans or blueprints 1.11. Unforeseen conditions 1.12. Delays in Construction 1.13. Mistakes 1.14. Incompetence workers or stakeholders 1.15. Inexperience workers or stakeholders
2. Stakeholder's Interest	May include: 2.1. Worker's and Employee's Interest 2.2. Manager's Interest 2.3. Owner's Interest 2.4. Supplier's Interest 2.5. Society Interest 2.6. Government Interest 2.7. Creditor's Interest 2.8. Shareholder's Interest 2.9. Customer's Interest
3. Controls	May include: 3.1. Engineering 3.2. Administrative 3.3. Personal 3.4. Solutions

EVIDENCE GUIDE

<p>1. Critical aspect of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Determined construction work issues based on Contract Documents, Site Strategies and Site Conditions 1.2 Investigated construction work issues in accordance with company and client's policies and procedures 1.3 Identified controls in accordance with company and client's policies and procedures 1.4 Evaluated controls based on Contract Documents, Site Strategies and Site Conditions 1.5 Updated work activities based on approved action plans 1.6 Communicated action plans in accordance with company and client's policies and procedures
<p>2. Resource implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Workplace 2.2. Relevant Tools, Materials, Construction Documents, Forms and Records
<p>3. Method of assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Written-Examination 3.2 Direct observation / 3.3. Portfolio with Interview 3.4. Case Study 3.5. Third Party Report
<p>4. Context for assessment</p>	<ul style="list-style-type: none"> 4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center

UNIT OF COMPETENCY : **LEAD WORK GROUPS**

UNIT CODE : **CON312339**

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

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Align work activities	1.1. Targets are discussed in accordance with company and client's policies and procedures 1.2. Work Load Priorities are discussed based on the Master Schedule 1.3. Work interfaces are discussed based on contract and legal constraints in accordance with company and client's policies and procedures*	1.1 Master Schedule Preparation 1.2 Action Planning 1.3 Program Development and Implementation 1.4 Direction Setting 1.5 Goal Setting 1.6 Types Contracts 1.7 Contract and Legal Constraints	1.1. Write policies and other business communication tools 1.2. Set Work Objectives 1.3. Write action Plan Statements

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Implement work Activities	2.1. Coordination Meetings are conducted in accordance with company and client's rules and regulations 2.2. Tasks are identified based on Contract documents and Work Strategies 2.3. Accountabilities are set in accordance with company and client's policies and procedures	2.1. Work Integration 2.2. Construction Documents 2.3. Work Methodology 2.4. Facilitation of Meeting	2.1. Ability to command 2.2. Coordination & Facilitation Skills
3. Promote work commitment	3.1 Stakeholder's Contributions are considered in formulating targets and schedules in accordance with company and client's policies and procedures 3.2 Feedback is provided to the workers in accordance with company and client's policies and procedures 3.3 Encouragement is provided to the workers in achieving targets despite of construction work challenges in accordance with company and client's policies and procedures	3.1 Construction Stakeholders 3.2 Work Motivation 3.3 Feedback	3.1. Ability to receive and provide feedback

RANGE OF VARIABLES

VARIABLE	RANGE
1. Contract and Legal Constraints	May include: 1.1 Economic Constraints 1.2 Legal Constraints 1.3 Environmental Constraints 1.4 Technical Constraints 1.5 Social Constraints 1.6 Terms and Conditions 1.7 Budget 1.8 Specifications 1.9 Payment Basis 1.10 Contract Price 1.11 Billing Procedures 1.12 Construction Schedules 1.13 Scope of Work 1.14 Construction Condition and Responsibilities 1.15 Contract Laws 1.16 Lien Requirements 1.17 Claims Procedures 1.18 Substantial Completion 1.19 Liquefied Damages 1.20 Suspense of Work
2. Construction Work Challenges	May include: 2.1. Changing Objectives, 2.2. Changing Deliverable 2.3. Changing Deadlines 2.4. Variation Orders 2.5. Change Orders 2.6. Inconsistencies 2.7. Limited Resources 2.8. Unskilled Workers 2.9. Outdated or New Technologies 2.10. Low Productivity 2.11. High Absenteeism 2.12. Incompetence 2.13. Delays 2.14. Lack of Budget 2.15. Unclear Instructions or Specifications

EVIDENCE GUIDE

<p>1. Critical aspect of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Discussed desired work outcomes in accordance with company and client's policies and procedures 1.2 Discussed work interface based on contract and legal constraints in accordance with company and client's policies and procedures 1.3 Conducted coordination meeting in accordance with company and client's policies and procedures 1.4 Identified task based on Contract documents and Work Strategies 1.5 Provided feedback to workers in accordance with company and client's policies and procedures 1.6 Provided encouragement to the workers in achieving targets despite of challenges in accordance with company and client's policies and procedures
<p>2. Resource implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Workplace 2.2 Relevant Tools, Materials, Construction Documents, Forms and Records
<p>3. Method of assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1. Written-Examination 3.2. Direct observation / 3.3. Portfolio with Interview 3.4. Case Study 3.5. Third Party Report
<p>4. Context for assessment</p>	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center</p>

UNIT OF COMPETENCY : **EVALUATE WORK GROUP ACCOMPLISHMENT**

UNIT CODE : **CON312340**

UNIT DESCRIPTOR : This unit covers the knowledge, skills, and attitudes in evaluating work group accomplishment.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Set work performance measure	1.1. Stakeholder's Instructions and Expectations are reviewed in accordance with company and client's rules and regulations 1.2. Site Strategies are clarified in accordance with company and client's policies and procedures 1.3. Key Performance Criteria are identified in accordance with company and client's policies and procedures	1.1 Key Result Area 1.2 Key Performance Criteria 1.3 Construction Metrics 1.4 Productivity Analysis	1.1. Set guidelines and criteria 1.2. Validate measurement system

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Evaluate work accomplishments	2.1. Work accomplishment data are collected in accordance with company and client's policies and procedures 2.2. Work accomplishment data are analyzed versus planned accomplishments in accordance with company and client's policies and procedures 2.3. Productivity improvement initiatives are recommended in accordance with company and client's policies and procedures	2.1 Work Accomplishment Data 2.2 Work accomplishment data analysis 2.3 Sampling Plan	2.1. Can collect & validate data 2.2. Data Analysis
3. Present actual work accomplishments	3.1. Accomplishment Reports are prepared in accordance with company and client's policies and procedures 3.2. Reports are presented in accordance with company and client's policies and procedures* 3.3. Stakeholder's feedback are accepted in accordance with company and client's policies and procedures	3.1. Accomplishment Report Presentation Models 3.2. Monitoring Illustrations	3.1. Create complex reports 3.2. Adept in preparing presentations 3.3. Report Presentation

RANGE OF VARIABLES

VARIABLE	RANGE
1. Stakeholder	May include: 1.1. Investors 1.2. Suppliers 1.3. Financial Firms 1.4. Communities 1.5. Trade Associations 1.6. Regulatory Authorities 1.7. Emergency Services 1.8. Architects 1.9. Site Supervisor/Foreman 1.10. Engineers 1.11. Technicians 1.12. Buyer 1.13. Estimators 1.14. Surveyors 1.15. Managers 1.16. City Planner 1.17. Marketing 1.18. Procurement 1.19. Craftsman/Direct Labors 1.20. Co-workers
2. Key Performance Criteria	May include: 2.1. Cycle Time – Manpower, Materials and Equipment 2.2. Employee Satisfaction 2.3. Amendment Index 2.4. Supplier Evaluation(Services, materials, Sub-Contracts and Projects) 2.5. Percentage of Completed Task 2.6. Direct Labor Efficiency 2.7. Productivity 2.8. Duration and Cost 2.9. Safety 2.10. Profitability 2.11. Rework Index 2.12. Customer Satisfaction 2.13. Defects 2.14. Impact on the Environment 2.15. Impact on Biodiversity 2.16. Energy Use to Construction 2.17. Water Use due to Construction 2.18. Waste due to Construction

VARIABLE	RANGE
3. Work Accomplishment Data	May include: 3.1. Daily Accomplishment Reports 3.2. Construction Work Summary 3.3. Progress and Deviation from Plans 3.4. Completed Activities 3.5. Forecast 3.6. Actual Accomplishment 3.7. Metrics 3.8. Overdue Activities 3.9. Financial Status 3.10. Change Requests Histories
4. Stakeholder's Feedback	May include: 4.1. Action Plans 4.2. Instructions 4.3. Clarifications 4.4. General Directions 4.5. Strategies 4.6. New Objectives 4.7. Changes 4.8. Observations

EVIDENCE GUIDE

<p>1. Critical aspect of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Clarified tactical strategies in accordance with company and client's policies and procedures</p> <p>1.2 Identified key performance criteria in accordance with company and client's policies and procedures</p> <p>1.3 Analyzed work accomplishment data versus planned accomplishments in accordance with company and client's policies and procedures</p> <p>1.4 Recommended productivity improvement initiatives in accordance with company and client's policies and procedures</p> <p>1.5 Prepared accomplishment reports in accordance with company and client's policies and procedures</p> <p>1.6 Presented reports in accordance with company and client's policies and procedures</p>
<p>2. Resource implications</p>	<p>The following resources should be provided:</p> <p>2.1. Workplace</p> <p>2.2. Relevant Tools, Materials, Construction Documents, Forms and Records</p>
<p>3. Method of assessment</p>	<p>Competency in this unit may be assessed through:</p> <p>3.1. Written-Examination</p> <p>3.2. Direct observation /</p> <p>3.3. Portfolio with Interview</p> <p>3.4. Case Study</p> <p>3.5. Third Party Report</p>
<p>4. Context for assessment</p>	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center</p>

UNIT OF COMPETENCY : MAINTAIN QUALITY, ENVIRONMENTAL, HEALTH SAFETY (QEHS) AND COMPANY POLICIES COMPLIANCE

UNIT CODE : CON312341

UNIT DESCRIPTOR : This unit covers the knowledge, skills, and attitudes in maintaining QEHS compliance.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify QEHS & Company Policies Requirements	1.1. Work activities are reviewed in accordance with QEHS requirements 1.2. QEHS requirements are identified in accordance with company and client's policies and procedures 1.3. Non-compliance are assess in accordance company and client's policies and procedures	1.1 QEHS Requirements 1.2 Non-compliance in QEHS Requirements	1.1 Job hazard analysis 1.2 Auditing Skills 1.3 Quality Planning 1.4 EHS Planning

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms are elaborated in the Range of Variables</i>	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Recommend controls and improvement measures	2.1. Control options are identified in accordance with company and client's policies and procedures* 2.2. Improvement Plans are proposed in accordance with company and client's policies and procedures* 2.3. Approved QEHS action plans are accepted in accordance company and client's policies and procedures	2.1 Damage and Waste controls 2.2 Total Quality Management 2.3 Risk Control 2.4 Aspect and Impacts	2.1. QEHS Report Writing 2.2. Can recommend controls
3. Implement QEHS and Company action plans	3.1. Approved QEHS action plans are analyzed in accordance with company and client's policies and procedures 3.2. Workforce is instructed to follow approved action plans in accordance with company and client's policies and procedures* 3.3. Follow-ups are conducted to monitor changes or improvement in accordance with company and client's policies and procedures	3.1. QEHS Plans, Preparation & Analysis	3.1. Ability to give instructions

RANGE OF VARIABLES

VARIABLE	RANGE
1. QEHS Requirements	May include: <ol style="list-style-type: none"> 1.1. QEHS Policy 1.2. QEHS Planning 1.3. QEHS Compliance Obligations 1.4. EHS Management Program 1.5. QEHS Manual 1.6. QEHS Control of Documents, Creating and Updating 1.7. QEHS Control of Records 1.8. Management Review 1.9. Resource Management 1.10. Assignement of Personnel 1.11. Training, Awareness and Competency 1.12. Organizational Knowledge 1.13. Infrastructure 1.14. Work Environment 1.15. Responsibilities and Authorities 1.16. Operaation Planning and Control 1.17. Client-Related Processes 1.18. Design 1.19. Purchasing Informanction 1.20. Operations Control 1.21. Control of Changes 1.22. Control of Measuring and Monitoting Devices 1.23. Identifcation and Traceability 1.24. Contorl of Non-conformity 1.25. Continual Improvement 1.26. Corrective and Preventive Actionsw

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Identified QEHS requirement in accordance with company and client's policies and procedures 1.2 Assess non-compliance in accordance with company and client's policies and procedures 1.3 Identified control options in accordance with company and client's policies and procedures 1.4 Proposed improvement plans in accordance with company and client's policies and procedures 1.5 Analyzed QEHS actions in accordance with company and client's policies and procedures 1.6 Instructed workforce to follow approved action plans in accordance with company and client's policies and procedures
<p>2. Resource implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1. Workplace 2.2. Relevant Tools, Materials, Construction Documents, Forms and Records
<p>3. Method of assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Written-Examination 3.2 Direct observation / 3.3. Portfolio with Interview 3.4. Case Study 3.5. Third Party Report
<p>4. Context for assessment</p>	<p>4.1 Competency may be assessed in actual workplace or at the designated TESDA Accredited Assessment Center</p>

TRAINEE ENTRY REQUIREMENTS:

Student/trainee must possess the following qualifications:

1. High School Graduate
2. Currently employed and/or with affiliations in on-going construction activities
3. At least 4 Years as Foreman or Trade Supervisor functions
4. Can communicate both orally and in writing
5. Can perform basic mathematical computation and mensuration

TRAINER'S QUALIFICATION:

1. Must be a holder of Trainer's Methodology Certificate (TMC) in Level I or COC1 of TM I or any Trainer's Training Certificate;
2. Must have at least two (2) years teaching/training experience;
3. Must have at least 5 years job/industry experience, two (2) years of which are in supervisory level;
4. Preferably a graduate of Construction-Related Courses; and
5. Preferably with training on construction safety guidelines and procedures conducted by OSHC and DOLE accredited Safety Training Organizations

ACKNOWLEDGEMENTS

The Technical Education and Skills Development Authority (TESDA) wishes to extend thanks and appreciation to the many representatives of business, industry, academe and government agencies who donated their time and expertise to the development of this Competency Standard.

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