DEMONSTRATE ENVIRONMENTAL LITERACY

UNIT CODE: ICT/OS/CS/BC/06/6/A

UNIT DESCRIPTION

This unit specifies the competencies required to demonstrate environmental literacy. It involves, controlling environmental hazard and environmental pollution, demonstrating sustainable resource use, evaluating current practices in relation to resource usage, identifying environmental legislations/conventions for environmental concerns, implementing specific environmental programs, monitoring activities on environmental protection/Programs , analyzing resource use and developing resource conservation plans

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace function.	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements. ***Bold and italicized terms are elaborated in the Range***
1. Control environmental hazard	1.1 Storage methods for environmentally hazardous materials are strictly followed according to environmental regulations and OSHS. 1.2 Disposal methods of hazardous wastes are followed according to environmental regulations and OSHS. 1.3 ***PPE*** is used according to OSHS.
2. Control environmental Pollution	2.1 Environmental pollution ***control measures*** are implemented in accordance with international protocols. 2.2 Procedures for solid waste management are observed according Environmental Management and Coordination Act 1999 2.3 Methods for minimizing noise pollution is complied with based on Noise and Excessive Vibration *Pollution and* Control *Regulations*, 2009
3. Demonstrate sustainable resource use	3.1 Methods for minimizing wastage are complied with based on organizational waste management guide

		3.2	Waste management procedures are employed following principles of 3Rs (Reduce, Reuse, Recycle)
		3.3	Methods for economizing and reducing resource consumption are practiced as per the Constitution of Kenya 2010 Article 69 .
4.	Evaluate current practices in relation to resource usage	4.1	Information on resource efficiency systems and procedures are collected and provided as per work groups/sector
		4.2	Current resource usage is measured and recorded as per work group
		4.3	Current purchasing strategies are analyzed and recorded according to industry procedures.
		4.4	Current work processes to access information and data is analyzed following enterprise protocol.
5.	Identify environmental legislations/conventions for environmental concerns	5.1	Environmental legislations/conventions and local ordinances are identified according to the different environmental aspects/impact
		5.2	Industrial standard/environmental practices are described according to the different environmental concerns
6.	Implement specific environmental programs	6.1	Programs/Activities are identified according to organizations policies and guidelines.
		6.2	Individual roles/responsibilities are determined and performed based on the activities identified.
		6.3	Problems/constraints encountered are resolved in accordance with organizations' policies and guidelines
		6.4	Stakeholders are consulted based on company guidelines
7.	Monitor activities on Environmental protection/Programs	7.1	Activities are periodically monitored and Evaluated according to the objectives of the environmental program
		7.2	Feedback from stakeholders are gathered and considered in Proposing enhancements to the program based on consultations
		7.3	Data gathered are analyzed based on Evaluation requirements

		7.4 Recommendations are submitted based on the findings
		7.5 Management support systems are set/established to sustain and enhance the program
		7.6 Environmental incidents are monitored and reported to
		7.7 concerned/proper authorities
8. Analyze resource use		8.1 All resource consuming processes are Identified as per the organizational work plan
		8.2 Quantity and nature of resource consumed is determined based on processes
		8.3 Resource flow is analyzed as per different parts of the process.
		8.4 Wastes are classified according to NEMA regulations on waste management.
9. Develop resource Conservation plans		9.1. Efficiency of use/conversion of resources is determined according to industry protocol.
		9.2. Causes of low efficiency of use of resources are Determined based on industry protocol.
		9.3. Plans for increasing the efficiency of resource use are developed based on findings.

RANGE

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

Variable	Range
1. PPE may include but not limited to	• Mask • Gloves • Goggles • Safety hat • Overall • Hearing protector
2. Control measures may include but not limited to	• Methods for minimizing or stopping spread and ingestion of airborne particles • Methods for minimizing or stopping spread and ingestion of gases and fumes • Methods for minimizing or stopping spread and ingestion of liquid wastes

REQUIRED SKILLS AND KNOWLEDGE

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

Required Skills

The individual needs to demonstrate the following skills:

- Measuring
- Recording
- Analytical
- Monitoring
- Communication
- Writing

Required Knowledge

The individual needs to demonstrate knowledge of:

- PPEs
- Environmental regulations
- OSHS
- Pollution
- Waste management
- Principle of 3Rs
- Types of resources
- Techniques in measuring current usage of resources
- Environmental hazards
- Regulatory requirements

EVIDENCE GUIDE

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

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Controlled environmental hazard 1.2 Controlled environmental pollution 1.3 Demonstrated sustainable resource use 1.4 Evaluated current practices in relation to resource usage

		1.5 Demonstrated knowledge of environmental legislations and local ordinances according to the different environmental issues /concerns. 1.6 Described industrial standard environmental practices according to the different environmental issues/concerns. 1.7 Resolved problems/ constraints encountered based on management standard procedures 1.8 Implemented and monitored environmental practices on a periodic basis as per company guidelines 1.9 Recommended solutions for the improvement of the program 1.10 Monitored and reported to proper authorities any environmental incidents
	2. Resource Implications	The following resources should be provided: 2.1 Workplace with storage facilities 2.2 Tools, materials and equipment relevant to the tasks (e.g. Cleaning tools, cleaning materials, trash bags) 2.3 PPE, manuals and references 2.4 Legislation, policies, procedures, protocols and local ordinances relating to environmental protection 2.5 Case studies/scenarios relating to environmental Protection
3	Methods of Assessment	Competency in this unit may be assessed through: 3.1 Observation 3.2 Oral questioning 3.3 Written test 3.4 Portfolio of Evidence 3.5 Interview 3.6 Third party report
4	Context of Assessment	Competency may be assessed 4.1 On-the-job 4.2 Off-the –job 4.3 During Industrial attachment
5	Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.