DEMONSTRATE ENVIRONMENTAL LITERACY

UNIT CODE: SW/OS/CP/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	PERFORMANCE CRITERIA
These describe the key outcomes which make up workplace function.	These are assessable statements which specify the required level of performance for each of the elements. Bold and italicized terms are elaborated in the Range
Control environmental hazard	 Storage methods for environmentally hazardous materials are strictly followed according to environmental regulations and OSHS. Disposal methods of hazardous wastes are followed according to environmental regulations and OSHS. PPE is used according to OSHS.
2. Control environmental Pollution	 2.1 Environmental pollution <i>control measures</i> 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 <i>Pollution and</i> Control <i>Regulations</i>, 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	4.1	Information on resource efficiency systems and
	practices in relation to		procedures are collected and provided as per work
	resource usage		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	5.1	Environmental legislations/conventions and local
	legislations/conventions		ordinances are identified according to the different
	for environmental		environmental aspects/impact
	concerns	5.2	Industrial standard/environmental practices are
			described according to the different environmental
			concerns
6.	Implement specific	6.1	Programs/Activities are identified according to
	environmental programs		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
L_			guidelines
7.	Monitor activities on	7.1	Activities are periodically monitored and
	Environmental		Evaluated according to the objectives of the
	protection/Programs	7.0	environmental program
		7.2	E
			considered in Proposing enhancements to the
		7.0	program based on consultations
		7.3	Data gathered are analyzed based on Evaluation
		7.4	requirements
		7.4	
		7 5	findings Management support systems are set/astablished
		7.5	2 11 2
		7.6	to sustain and enhance the program Environmental incidents are monitored and
		7.0	reported to
		7.7	concerned/proper authorities
8	Analyze resource use		All resource consuming processes are Identified as
0.	mary ze resource use	0.1	per the organizational work plan
		82	Quantity and nature of resource consumed is
		0.2	determined based on processes
<u> </u>]	determined bused 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	9.1. Efficiency of use/conversion of resources is
	Conservation plans	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
PPE may include but not limited to	 Mask Gloves Goggles Safety hat Overall
	Hearing protector
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	Assessment requires evidence that the candidate:
Aspects of	
Competency	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	The following resources should be provided:
Implications	2.1 Workshop with store of facilities
	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	Competency in this unit may be assessed through:
	Assessment	3.1 Observation3.2 Oral questioning3.3 Written test3.4 Portfolio of Evidence
		3.5 Interview
		3.6 Third party report
4	Context of	Competency may be assessed
	Assessment	4.1 On-the-job
		4.2 Off-the –job
		4.3 During Industrial attachment
5	Guidance	Holistic assessment with other units relevant to the industry
	information for assessment	sector, workplace and job role is recommended.