DEMONSTRATE ENVIRONMENTAL LITERACY

UNIT CODE: ENG/OS/RAC/BC/05/5/A

UNIT DESCRIPTION

This unit describes the competencies required to demonstrate understanding of environmental literacy. It involves controlling environmental hazard, controlling control environmental pollution, complying with workplace sustainable resource use, evaluating current practices in relation to resource usage, identifying environmental legislations/conventions for environmental concerns, implementing specific environmental programs and monitoring activities on environmental protection/programs.

ELEMENT	PERFORMANCE CRITERIA
These describe the key	These assessable statements specify the required level of
outcomes that make up	performance for each of the elements.
workplace function.	Bold and italicized terms are elaborated in the Range
1. Control environmental	1.1 Storage methods for environmentally hazardous materials
hazard	are strictly followed according to environmental
	regulations and OSHS.
	1.2 Disposal methods of hazardous wastes are followed
	always according to environmental regulations and OSHS.
	1.3 PPE is used according to OSHS.
2. Control environmental	2.1 Environmental pollution <i>control measures</i> are compiled
Pollution control	following standard protocol.
	2.2 Procedures for solid waste management are observed
	according to Environmental Management and
	Coordination Act 1999
	2.3 Methods for minimizing <i>noise pollution</i> is complied with
	based on Noise and Excessive Vibration Pollution and
	Control Regulations, 2009
3. Demonstrate sustainable	3.1 Methods for minimizing wastage are complied with.
resource use	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 Environmental
	Management and Coordination Act 1999
4. Evaluate current practices	4.1 Information on resource efficiency systems and
in relation to resource	procedures are collected and provided to the work group
usage	where appropriate.
č	4.2 Current resource usage is measured and recorded by
	members of the work group.

ELEMENTS AND PERFORMANCE CRITERIA

	4.2	
	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 <i>legislations/conventions</i> 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 guidelines
7. Monitor activities on	7.1	Activities are periodically monitored and evaluated
Environmental		according to the objectives of the environmental Program
protection/Programs	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
	/ 10	requirements
	74	Recommendations are submitted based on the findings
	7.5	Management support systems are set/established to sustain
	1.5	and enhance the program
	7.6	Environmental incidents are monitored and reported to
	1.0	•
		concerned/proper authorities

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	• Mask
limited to:	• Gloves
	• Goggles
	• Safety hat
	• Overall
	Hearing protector
	Safety boots
2. Environmental pollution	• Methods for minimizing or stopping spread and
control measures may	ingestion of airborne particles
include but not limited	• Methods for minimizing or stopping spread and
to:	ingestion of gases and fumes
	• Methods for minimizing or stopping spread and
	ingestion of liquid wastes
3. Waste management	Sorting
procedures may include	• Storing of items
but not limited to:	Recycling of items
	Disposal of items
4. Resources may include	• Electric
but not limited to:	• Water
	• Fuel
	Telecommunications
	• Supplies
	• Materials
5. Workplace	Biological hazards
environmental hazards	Chemical and dust hazards
may include but not	Physical hazards
limited to:	,
6. Organizational systems	• Supply chain, procurement and purchasing
and procedures may	Quality assurance
include but not limited	• Making recommendations and seeking approvals
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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:

- Observation
- Measuring
- Writing

- Communication
- Analytical
- Monitoring
- Evaluation

Required Knowledge

- The individual needs to demonstrate knowledge of:
 - Storage methods of environmentally hazardous materials
 - Disposal methods of hazardous wastes
 - Usage of PPE Environmental regulations
 - OSHS
 - Types of pollution
 - Environmental pollution control measures
 - Different solid wastes
 - Solid waste management
 - Different noise pollution
 - Methods of minimizing noise pollution
 - Solid Waste Act
 - Methods of minimizing wastage
 - Waste management procedures
 - Economizing of resource consumption
 - 3Rs principle
 - Types of resources
 - Techniques in measuring current usage of resources
 - Calculating current usage of resources
 - Types of workplace environmental hazards
 - Environmental regulations
 - Environmental regulations applying to the enterprise.
 - Measurement and recording of current resource usage
 - Analysis current work processes to access information and data Analysis of data and information
 - Identification of areas for improvement
 - Resource consuming processes
 - Determination of quantity and nature of resource consumed
 - Analysis of resource flow of different parts of the resource flow process
 - Use/conversion of resources
 - Causes of low efficiency of use
 - Increasing the efficiency of resource use
 - Inspection of resource use plans

- Regulations/licensing requirements
- Determine benefit/cost for alternative resource sources
- Benefit/costs for different alternatives
- Components of proposals
- Criteria on ranking proposals
- Regulatory requirements
- Proposals for improving resource efficiency
- Implementation of resource efficiency plans
- Procedures in monitor implementation
- Adjustments of implementation plan
- Inspection of new resource usage

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	Assessment requires evidence that the candidate:
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 Implications	The following resources should be provided: 2.1 Workplace with storage facilities
	2.2 Tools, materials and equipment relevant to the tasks (ex. Cleaning
	tools, cleaning materials, trash bags, etc.)
	2.3 PPE
	2.4 Manuals and references
	2.5 Legislation, policies, procedures, protocols and local ordinances
	relating to environmental protection

			2.6 Case studies/scenarios relating to environmental Protection
3.	Methods	of	Competency in this unit may be assessed through:
	Assessment		3.1 Observation
			3.2 Oral questioning
			3.3 Written test
			3.4 Interview/Third Party Reports
			3.5 Portfolio of evidence
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 sector,
	information	for	workplace and job role is recommended.
	assessment		