### APPLY ENVIRONMENTAL LITERACY

UNIT CODE: CON/OS/BUT/BC/04/5/A

### **UNIT DESCRIPTION**

This unit specifies the competencies required to follow procedures for environmental hazard control, follow procedures for environmental pollution control, comply with workplace sustainable resource use, evaluate current practices in relation to resource usage, develop and adhere to environmental protection principles/strategies/guidelines, analyze resource use, develop resource conservation plans and implement selected plans.

### **ELEMENTS AND PERFORMANCE CRITERIA**

ELEMENT	PERFORMANCE CRITERIA
These describe the key	These are assessable statements which specify the required
outcomes which make up	level of performance for each of the elements.
workplace function.	Bold and italicized terms are elaborated in the Range
Control environmental     hazard	<ul> <li>1.1 Storage methods for environmentally <i>hazardous</i> materials are strictly followed according to environmental regulations and OSHS.</li> <li>1.2 <i>Disposal methods</i> of hazardous wastes are followed always according to environmental regulations and OSHS.</li> </ul>
	1.3 <b>PPE</b> is used according to OSHS.
2. Control environmental Pollution	<ul> <li>2.1 Environmental pollution <i>control measures</i> are compiled following standard protocol.</li> <li>2.2 Procedures for solid waste management are applied according to Environmental Management and Coordination Act 1999</li> <li>2.3 Methods for minimizing <i>noise pollution</i> are compiled following environmental regulations.</li> </ul>
3. Demonstrate sustainable resource use	<ul> <li>3.1 Methods for minimizing wastage are complied with.</li> <li>3.2 Waste management procedures are performed following principles of 3Rs (Reduce, Reuse, Recycle)</li> <li>3.3 Methods for economizing or reducing resource consumption are practiced.</li> </ul>
4. Evaluate current practices in relation to resource usage	<ul> <li>4.1 Information on resource efficiency systems and procedures are collected and provided to the work group where appropriate.</li> <li>4.2 Current resource usage is measured and recorded by members of the work group.</li> </ul>

		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.	Apply Environmental	5.1 Environmental <i>legislations/conventions</i> and local
	legislations/conventions	ordinances are applied according to the different
	for environmental	environmental aspects/impact
	concerns	5.2 Industrial standard/environmental practices are
		applied according to the different environmental
		concerns
6.	Implement specific	6.1 Environmental Programs/Activities are implemented
	environmental programs	according to organizations policies and guidelines.
		6.2 Individual roles/responsibilities are performed
		according to organizations policies and guidelines.
		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
	protection/Programs	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
		concerned/proper authorities
8.	Analyze resource use	8.1 Resource consuming processes are identified
		8.2 Quantity and nature of resource consumed is
		determined
		8.3 Resource flow through different parts of a process is
		analysed
		8.4 Wastes that can be possible resources are gathered
9.	Develop resource	9.1 Efficient use of resources is applied
	Conservation plans	9.2 Causes of Low efficiency use of resources are
		mitigated
		9.3 Plans for increasing the efficiency of resource use are
		established

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

# 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:

- Following storage methods of environmentally hazardous materials
- Following disposal methods of hazardous wastes
- Using PPE
- Practicing OSHS
- Complying environmental pollution control
- Observing solid waste management
- Complying methods of minimizing noise Pollution
- Complying methods of minimizing wastage
- Employing waste management procedures
- Economizing resource consumption
- Listing of resources used
- Measuring current usage of resources
- Identifying and reporting workplace environmental hazards
- Conveying all environmental issues
- Following environmental regulations
- Identifying environmental regulations
- Assessing procedures for assessing compliance
- Collecting information on environmental and resource efficiency systems and procedures, and Providing information to the work group
- Measuring and recording current resource usage
- Analysing and recording current purchasing strategies.
- Analysing current work processes to access information and data and Assisting identifying areas for improvement
- Analysing resource flow
- Determining efficiency of use/conversion of resources
- Determining causes of low efficiency of use
- Developing plans for increasing the efficiency of resource use
- Checking resource use plans
- Complying to regulations/licensing requirements
- Determining benefit/cost of plans
- Ranking proposals based on benefit/cost compared to limited resources
- Checking proposals meet regulatory requirements
- Monitoring implementation
- Making adjustments to plan and implementation
- checking new resource usage

### 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
- Methods of minimizing wstage
- Waste management procedures
- Economizing of resource consumption
- Principle of 3Rs
- 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.
- Procedures for assessing compliance with environmental regulations.
- Collection of information on environmental and resource efficiency systems and procedures,
- Measurement and recording of current resource usage
- Analysis and recording of current purchasing strategies.
- 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 Expressed knowledge of environmental legislations and	
	industrial standard environmental practices	
	1.6 Resolved problems/ constraints encountered based on	
	management standard procedures	
	1.7 Implemented and monitored environmental practices on a	
	periodic basis as per company guidelines	
	1.8 Recommended solutions for the improvement of the Program	
	1.9 Monitored and reported to proper authorities any	
	environmental incidents	
2. Resource	The following resources should be provided:	
Implications	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 Demonstration	
		3.2 Oral questioning	
		3.3 Written examination	
		3.4 Interview/Third Party Reports	
		3.5 Portfolio (citations/awards from GOs and NGOs, certificate of	
		training – local and abroad)	
		3.6 Simulations and role-plays	
4	Context of	Competency may be assessed in workplace or in a simulated	
	Assessment	workplace setting	
5	Guidance	5.1 Holistic assessment with other units relevant to the industry	
	information for	sector, workplace and job role is recommended.	
	assessment		