

## ENVIRONMENTAL LITERACY

**UNIT CODE: ENG/CU/AUT/BC/5/6**

### **Relationship to Occupational Standards:**

This unit addresses the unit of competency and meets the requirements specified by the Occupational Standards: **Demonstrate environmental literacy**

**Duration of Unit:** 60 hours

### **Unit Description**

This unit describes the competencies required to control environmental hazard, control environmental pollution, comply with workplace sustainable resource use, evaluate current practices in relation to resource usage, identify environmental legislations/conventions for environmental concerns, implement specific environmental programs, monitor activities on environmental protection/programs, analyze resource use and develop resource conservation plans.

### **Summary of Learning Outcomes**

1. Control environmental hazard
2. Control environmental Pollution
3. Demonstrate sustainable resource use
4. Evaluate current practices in relation to resource usage
5. Identify Environmental legislations/conventions for environmental concerns
6. Implement specific environmental programs
7. Monitor activities on Environmental protection/Programs
8. Analyze resource use
9. Develop resource conservation plans

### **Learning Outcomes, Content and Suggested Assessment Methods**

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
1. Control environmental hazard	<ul style="list-style-type: none"><li>• Purposes and content of Environmental Management and Coordination Act 1999</li><li>• Storage methods for environmentally hazardous materials</li><li>• Disposal methods of hazardous wastes</li></ul>	<ul style="list-style-type: none"><li>• Written questions</li><li>• Oral questions</li><li>• Observation of work procedures</li></ul>

	<ul style="list-style-type: none"> <li>Types and uses of PPE in line with environmental regulations</li> <li>Occupational Safety and Health Standards (OSHS)</li> </ul>	
2. Control environmental Pollution control	<ul style="list-style-type: none"> <li>Types of pollution</li> <li>Environmental pollution control measures</li> <li>Types of solid wastes</li> <li>Procedures for solid waste management</li> <li>Different types of noise pollution</li> <li>Methods for</li> </ul>	<ul style="list-style-type: none"> <li>Written questions</li> <li>Oral questions</li> <li>Observation of work procedures</li> <li>Role play</li> </ul>

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
	minimizing noise pollution	
3. Demonstrate sustainable resource use	<ul style="list-style-type: none"> <li>Types of resources</li> <li>Techniques in measuring current usage of resources</li> <li>Calculating current usage of resources</li> <li>Methods for minimizing wastage</li> <li>Waste management procedures</li> <li>Principles of 3Rs (Reduce, Reuse, Recycle)</li> <li>Methods for economizing or reducing resource consumption</li> </ul>	<ul style="list-style-type: none"> <li>Written questions</li> <li>Oral questions</li> <li>Observation of work procedures</li> <li>Role play</li> <li>□</li> </ul>
4. Evaluate current practices in relation to resource usage	<ul style="list-style-type: none"> <li>Collection of information on environmental and resource efficiency systems and procedures,</li> <li>Measurement and recording of current</li> </ul>	<ul style="list-style-type: none"> <li>Written questions</li> <li>Oral questions</li> <li>Observation of work procedures</li> <li>Role play</li> </ul>

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
	<p>resource usage</p> <ul style="list-style-type: none"> <li>• Analysis and recording of current purchasing strategies.</li> <li>• Analysis of current work processes to access information and data</li> <li>• Identification of areas for improvement</li> </ul>	
5. Identify Environmental legislations/conventions for environmental concerns	<ul style="list-style-type: none"> <li>• Environmental issues/concerns</li> <li>• Environmental legislations /conventions and local ordinances</li> <li>• Industrial standard /environmental practices</li> <li>• International Environmental Protocols (Montreal, Kyoto)</li> <li>• Features of an environmental strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Written questions</li> <li>• Oral questions</li> <li>• Observation of work procedures</li> </ul> <p>□</p>

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
6. Implement specific environmental programs	<ul style="list-style-type: none"> <li>• Community needs and expectations</li> <li>• Resource availability</li> <li>• 5s of good housekeeping</li> <li>• Identification of programs/Activities</li> <li>• Setting of individual roles /responsibilities</li> <li>• Resolving problems /constraints encountered</li> </ul>	<ul style="list-style-type: none"> <li>• Written questions</li> <li>• Oral questions</li> <li>• Observation of work procedures</li> <li>• Role play</li> </ul>

	<ul style="list-style-type: none"> <li>• Consultation with stakeholders</li> </ul>	
7. Monitor activities on Environmental protection/Programs	<ul style="list-style-type: none"> <li>• Periodic monitoring and Evaluation of activities</li> <li>• Gathering feedback from stakeholders</li> <li>• Analysing data gathered</li> <li>• Documentation of recommendations and submission</li> <li>• Setting of management support systems to sustain</li> </ul>	<ul style="list-style-type: none"> <li>• Oral questions</li> <li>• Written tests</li> <li>• Practical test</li> <li>• Observation</li> </ul>

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
	<p>and enhance the program</p> <p>□ Monitoring and reporting of environmental incidents to concerned /proper authorities</p>	
8. Analyze resource use	<ul style="list-style-type: none"> <li>• Identification of resource consuming processes</li> <li>• Determination of quantity and nature of resource consumed</li> <li>• Analysis of resource flow through different parts of the process.</li> <li>• Classification of wastes for possible source of resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Oral questions</li> <li>• Practical test</li> <li>• Observation</li> </ul>
9. Develop resource Conservation plans	<ul style="list-style-type: none"> <li>• Determination of efficiency of use/conversion of resources</li> <li>• Causes of low efficiency of use of</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Oral questions</li> <li>• Practical test</li> <li>• Observation</li> </ul>
<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
	<p>resources</p> <p>□ Plans for increasing the efficiency of resource use</p>	

**Suggested Delivery Methods**

- Instructor led facilitation of theory
- Practical demonstration of tasks by trainer
- Practice by trainees
- Observations and comments and corrections by trainers

**Recommended Resources**

- Standard operating and/or other workplace procedures manuals
- Specific job procedures manuals
- Environmental Management and Coordination Act 1999
- Machine/equipment manufacturer's specifications and instructions
- Personal Protective Equipment (PPE)
- ISO standards
- Company environmental management systems (EMS)
- Montreal Protocol
- Kyoto Protocol

easytvvet.com