

Unit AE5 Develop and implement preventive conservation procedures for items

Elements

AE5.1 Specify the appropriate environment in which to maintain and protect items

AE5.2 Monitor, evaluate and advise on the environmental protection of items

Unit Commentary

This unit is for archaeological conservators; people who are required to have knowledge of a range of items or specific groups of items in archives or collections, as well as having expert knowledge of the potential conservation problems that may be encountered with such items.

Once a conservation option has been selected it has to be implemented. One type of option is the application of preventive conservation procedures. This involves the specification of an appropriate environment for the protection of the item and advising on how to ensure the environment is protecting the items concerned. The specific complexities of the items must be taken into account during this process. This unit covers specifying a suitable environment for the item, evaluating how well the item is being protected and advising on how this situation can be maintained.

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AE5.1 Specify the appropriate environment in which to maintain and protect items

Performance Required

This will involve:

- a) Identifying the items' appropriate **environmental requirements** in accordance with the selected conservation option and plan
- b) Monitoring the existing environmental conditions in the intended location accurately over a suitable period
- c) Identifying as quickly as possible any **evidence** that the environment is not suitable for the items
- d) **Exploring and testing** the application and effect of existing and new materials and procedures, and modifying them if necessary
- e) Assessing accurately the resources to implement specified procedures and passing details to the **relevant people**
- f) Drawing up specifications and procedures to control and monitor the items' environment in consultation with the appropriate people
- g) Determining and implementing suitable specifications for protecting items during use, storage, display or transportation
- h) Communicating with building engineers, architects, surveyors and designers of the items' environmental requirements, and establishing **monitoring procedures**
- i) **Recording and disseminating** recommendations and procedures according to requirements

Occupational Context

1 Environmental requirements

- controlled temperature/humidity
- controlled/ limited light
- air quality: clean, pollutant-free
- protection from pests
- protection from shock/ vibration
- use of biological and chemical agents

2 Evidence

- change in composition/ coloration/ size/ shape
- discharge, radio activity, etc
- measurements such as temperature

3 Exploring and testing

- under controlled conditions
- using accurate measurement and data analysis
- under appropriate observation/ supervision
- using appropriate equipment and procedures

4 Relevant people

- supervisors/ managers
- professional experts/ consultants
- resource suppliers
- process delivery agents
- training providers
- maintenance and support staff
- researchers

5 Monitoring procedures

- measuring instruments
- observation/ supervision/ inspection
- regular/ frequent/ 24hrs
- in conjunction with security where appropriate

6 Recording and disseminating

- using a technical information management system/ database/ telecommunications
- using formal face to face/ interactive reporting
- through written documentation
- through graphical/ visual/ verbal presentation

Knowledge Requirements

You need to know and understand how to:

- Draw up specifications for the control of the item's environment
- Draw up guidelines and procedures for monitoring the item's environment
- Select packaging and display materials, and handling procedures

You need to know about:

Appropriate environments

- The equipment that is available to monitor the environment
- How the location's environment can be accurately monitored, and the principal factors to monitor

Specification and planning

- What is in the conservation plan, and the parameters for action
- The indications that an environment is not suitable for the items
- The factors that need to be considered during transit
- Who are the appropriate people to inform about the items' environment
- The health and safety procedures for the available treatments

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AE5.1 Specify the appropriate environment in which to maintain and protect items

Required Skills

You should demonstrate:

- How to identify the item's appropriate environmental requirements
- setting up procedures for monitoring the item's environment
- How to respond to adverse environmental conditions
- How to assess resources necessary for the implementation of environmental monitoring procedures

Evidence Required

You should provide evidence that you can specify the appropriate environment in which to maintain and protect items

The candidate should be questioned, based upon the documentation provided, to explore how they

- specify the appropriate environment in which to maintain and protect items and collections.

Evidence Rules

The candidate should have been developed and implemented a range of preventive conservation procedures typical to their work area.

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AE5.2 Monitor, evaluate and advise on the environmental protection of items

Performance Required

This will involve:

- a) Establishing schedules and procedures for monitoring and maintaining the environmental protection and condition of items, and evaluating their **effectiveness**.
- b) Ensuring schedules and procedures for monitoring and maintaining the environment of the items are correctly implemented
- c) Identifying as quickly as possible any evidence of instability or change in the items and any other indications that the environment is not suitable, and taking **appropriate action**
- d) Implementing ongoing conservation procedures according to schedule
- e) Taking appropriate action when specifications for the environmental protection and condition of items are not being met
- f) Ensuring the records of the monitoring process are clear and accurate
- g) Complying at all times with health and safety procedures

Occupational Context

1 Effectiveness

- efficient protection and maintenance of condition
- in terms of costs and benefits of resources and their outputs
- in relation to strategy expectations, targets and milestones

2 Appropriate action

- removal from/ adjusting environment
- improving monitoring, observation, inspection and measurement procedures
- appropriate for resource capacity
- appropriate for item requirements
- appropriate for organisational policy and culture
- appropriate for the objectives of the discipline and for contribution to it

Knowledge Requirements

You need to know about:

Monitoring and Evaluation

- How the location's environment can be accurately monitored, and the principal factors to monitor
- The indications that an environment is not suitable for the items

Advising

- The action that can be taken if the environment is not suitable for the item
- Who are the appropriate people to inform of any problems
- The health and safety implications of the available treatments
- The implications of an inappropriate environment.

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AE5.2 Monitor, evaluate and advise on the environmental protection of items

Required Skills

You should demonstrate:

- Observation skills and attention to detail
- Record-keeping and data analysis skills
- Communication skills

Evidence Required

You should provide evidence that you can monitor, evaluate and advise on the environmental protection of items

The candidate should be questioned, based upon the documentation provided, to explore how they

- monitor, evaluate and advise on the environmental protection of items.

Evidence Rules

The candidate should have been developed and implemented a range of preventive conservation procedures typical to their work area.