



Australian Government

UEERA0054 Maintain microbial control of refrigeration and air conditioning systems

Release: 1

UEERA0054 Maintain microbial control of refrigeration and air conditioning systems

Modification History

Release 1: This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to maintain microbial control of refrigeration and air conditioning systems.

It includes quality assurance and risk management compliance processes for maintenance of the air and water systems associated with refrigeration and air conditioning.

It also includes working safely and to technical, quality and risk management industry standards, work specifications, maintenance schedules and sample inspections; evaluating components and completing the necessary maintenance documentation.

The skills and knowledge in this unit will be applied by those cleaning and maintaining refrigeration and air conditioning chilled water, hot water or cooling tower water systems.

Most state/territory jurisdictions have legislative requirements for the management of microbial control in cooling water systems to prevent the growth and transmission of Legionnaires' Disease.

Permits may also be required for some work environments, such as confined spaces, working aloft, near live electrical apparatus and site rehabilitation.

Pre-requisite Unit

Not applicable.

Competency Field

Refrigeration and air-conditioning

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Prepare to maintain microbial control of air and water systems

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) hazards, risk control methods, relevant standards, codes and legislation are obtained and applied in accordance with workplace procedures
- 1.2** Safety hazards which have not been previously identified are noted on risk assessment documents and risk control measures determined and implemented
- 1.3** Maintenance schedule and process compliance requirements are confirmed and appropriately sequenced in accordance with legislative, industry standards and code requirements and established procedures
- 1.4** Appropriate person/s is consulted to ensure the work is coordinated effectively with others involved on the worksite
- 1.5** Location of equipment to be maintained is determined from maintenance schedule, workplace procedures and/or system specifications and diagrams
- 1.6** Resources needed to conduct the maintenance are obtained in accordance with workplace procedures and checked against job requirements
- 1.7** Tools, equipment and testing devices needed to conduct the maintenance work are obtained in accordance with workplace procedures and checked for correct operation and safety

2 Maintain microbial control of air and water systems

- 2.1** Circuits/machines/plant are checked and isolated in accordance with WHS/OHS requirements and workplace procedures
- 2.2** Water samples are taken and tested in accordance with legislative, industry standards and code requirements and established methods and routines
- 2.3** Air and water system apparatus to be maintained is inspected and evaluated for compliance with legislative, industry standards and code requirements in accordance

with maintenance schedule.

- 2.4** Non-compliant apparatus/components/samples are documented and arrangements made for their rectification in accordance with workplace procedures
 - 2.5** Unplanned situations are responded to in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
 - 2.6** Ongoing checks of quality of maintenance work are undertaken in accordance with workplace procedures
 - 2.7** Maintenance process compliance is performed efficiently without waste of materials or damage to apparatus, the surrounding environment or services using sustainable energy practices
- 3 Complete maintenance processes and documentation**
- 3.1** Worksite and equipment are cleaned and made safe in accordance with workplace procedures
 - 3.2** Final checks are made to verify that the maintenance complies with maintenance requirements
 - 3.3** Maintenance completion is documented and appropriate person/s notified in accordance with established procedures and regulations

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

maintaining microbial control of refrigeration and air conditioning systems must include at least the following:

- two different air and water systems

Unit Mapping Information

This unit replaces and is equivalent to UEENEEJ168A Maintain microbial control of refrigeration and air conditioning systems.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>