

# AHCMKH403 Design and install enterprise milk cooling and storage

Release: 1

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#### **Modification History**

Release	TP Version	Comment
1	AHCv1.0	Initial release

#### **Application**

This unit of competency describes the skills and knowledge required to design and install on-farm milk cooling and storage systems.

All work must be carried out to comply with workplace procedures, work health and safety, animal welfare and biosecurity legislation and codes, and sustainability practices.

This unit applies to individuals who take responsibility for their own work and provide and communicate solutions to a range of predictable and sometimes unpredictable problems.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

#### Pre-requisite Unit

Nil.

#### **Unit Sector**

Milk Harvesting (MKH)

#### **Elements and Performance Criteria**

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
Determine cooling and storage system requirements	<ul> <li>1.1 Determine available cooling water supply quantity and test the quality of the water supply</li> <li>1.2 Ensure the planned milk cooling and storage systems meet industry standards and match enterprise and herd needs</li> <li>1.3 Determine and record design considerations including appropriate siting of components</li> </ul>

Approved Page 2 of 4

Element		Performance criteria
		1.4 Determine work health and safety hazards, assess risks, implement controls and report as required
2.	Determine milk pre-cooling requirements	<ul> <li>2.1 Measure and record maximum peak flow of milk delivery</li> <li>2.2 Check cooling water temperatures and quality against design specifications</li> <li>2.3 Compare available milk cooling equipment with design requirements and select suitable equipment</li> <li>2.4 Determine work health and safety and human health regulatory requirements and establish compliance targets</li> <li>2.5 Determine water cooling system requirements in line with planned equipment and available resources</li> </ul>
3.	Determine milk storage requirements	3.1 Determine enterprise milk production levels and projected production increases 3.2 Establish milk entry temperature and other critical design considerations in consultation with the enterprise and from available data 3.3 Select a suitable milk vat to meet shed production requirements and bulk milk collection routines
4.	Install milk cooling and storage equipment	<ul> <li>4.1 Install plate cooler and other components of the pre-cooling system in line with established system design and industry standards</li> <li>4.2 Install vat and refrigeration equipment to meet design specifications</li> <li>4.3 Complete commissioning tests to ensure the operation of all elements of the cooling and storage systems comply with performance targets and milk supply quality standards</li> </ul>
5.	Operate and maintain milk cooling and storage equipment	<ul><li>5.1 Complete routine maintenance program requirements in line with manufacturers' recommendations</li><li>5.2 Determine repair and service requirements, including rectification of operational faults, as part of maintenance routines</li></ul>

# **Foundation Skills**

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

Approved Page 3 of 4

### **Range of Conditions**

# **Unit Mapping Information**

This unit is equivalent to AHCMKH403A Design and install on-farm milk cooling and storage.

#### Links

Companion Volume implementation guides are found in VETNet - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</a>

Approved Page 4 of 4