



Australian Government

AHCMKH403 Design and install enterprise milk cooling and storage

Release: 1

AHCMKH403 Design and install enterprise milk cooling and storage

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.
1. Determine cooling and storage system requirements	1.1 Determine available cooling water supply quantity and test the quality of the water supply 1.2 Ensure the planned milk cooling and storage systems meet industry standards and match enterprise and herd needs 1.3 Determine and record design considerations including appropriate siting of components

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	2.1 Measure and record maximum peak flow of milk delivery 2.2 Check cooling water temperatures and quality against design specifications 2.3 Compare available milk cooling equipment with design requirements and select suitable equipment 2.4 Determine work health and safety and human health regulatory requirements and establish compliance targets 2.5 Determine water cooling system requirements in line with planned equipment and available resources
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	4.1 Install plate cooler and other components of the pre-cooling system in line with established system design and industry standards 4.2 Install vat and refrigeration equipment to meet design specifications 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
5. Operate and maintain milk cooling and storage equipment	5.1 Complete routine maintenance program requirements in line with manufacturers' recommendations 5.2 Determine repair and service requirements, including rectification of operational faults, as part of maintenance routines

Foundation Skills

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

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 -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCMKH403 Design and install enterprise milk cooling and storage

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Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- determine cooling and storage system requirements
- determine milk pre-cooling requirements
- determine milk storage requirements
- install milk cooling and storage equipment
- operate and maintain milk cooling and storage equipment
- implement enterprise work health and safety policies

Knowledge Evidence

The candidate must demonstrate knowledge of:

- relevant requirements and industry standards for design, planning, installing and operating milk cooling and milk storage systems
- types, functions, cleaning, operating, monitoring and maintenance of milk cooling and milk storage systems and all components
- requirements, components and considerations for designing, planning, siting and installing milk cooling and milk storage systems and their components, and to meet the needs of the enterprise
- requirements, criteria and assessment methods for determining water quality and the impacts of water quality on maintenance and performance of milk cooling and milk storage systems
- possible faults, problems and poor performance with milk cooling and milk storage systems and their components, impacts on enterprise operations and corrective actions for these faults and problems
- criteria and methods for assessing performance of milk cooling and milk storage systems and their components
- requirements and assessment methods for determining enterprise milk production levels

- relevant work health and safety requirements

Assessment Conditions

Competency is to be assessed in the workplace and/or simulated environment that accurately reflects performance in a real workplace setting.

Assessors must satisfy current standards for RTOs.

Links

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