



Australian Government

AMPA3118 Monitor pH and temperature decline

Release: 1

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Modification History

Release	TP Version	Comment
1	AMPv2.0	Initial release

Application

This unit describes the skills and knowledge required to conduct pH and temperature declines and weekly monitoring, as well as to validate results to ensure conformance to the pH and temperature window.

It is a licence requirement for Meat Standards Australia (MSA) enterprises to achieve the pH and temperature window.

This unit is for Quality Assurance Officers who have responsibility for monitoring pH or temperature window to AUS-MEAT and MSA standards. This unit is suitable for people working in Quality Assurance (QA) or a company grading role.

All work should be carried out to comply with workplace procedures, customer requirements and product specifications.

This unit applies to individuals who work under broad direction and take responsibility for their own work including limited responsibility for the work of others. They provide and communicate solutions to a range of predictable problems.

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

This unit must be delivered and assessed in the context of Australian meat processing standards and regulations.

Pre-requisite Unit

Nil.

Unit Sector

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.

Element	Performance criteria
1. Explain purpose of pH monitoring	1.1 Explain nature and purpose of pH monitoring 1.2 Explain the impact stress in an animal can have on pH 1.3 Explain the pH/temperature window and its importance to meat quality 1.4 Explain relationship of pH and temperature window to MSA standards (if applicable) 1.5 Explain the concepts of hot and cold shortening and the impact on meat quality 1.6 Describe corrective actions which can be taken if window performance is not achieved 1.7 Describe the process for pH and temperature monitoring 1.8 Explain hygiene and sanitation, contamination, and workplace health and safety considerations associated with pH and temperature decline monitoring
2. Conduct monitoring of the pH or temperature window	2.1 Demonstrate correct technique for pH and temperature measurement according to workplace requirements 2.2 Collect necessary information for validating monitoring 2.3 Collect valid and sufficient readings 2.4 Record and report results

Foundation Skills

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

Range of Conditions

Unit Mapping Information

New unit - no equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPA3118 Monitor pH and temperature decline

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Performance Evidence

The candidate must conduct pH and temperature declines and weekly monitoring, as well as validate results to ensure conformance to the pH and temperature window.

The candidate must:

- collect information on live animals to be used in pH and temperature monitoring
- conduct monthly and weekly monitoring of the pH and temperature window
- consistently collect valid information and readings
- observe, time and follow carcasses through the slaughter floor recording the following:
 - carcase information
 - chiller number
 - immobiliser information (if applicable)
 - rigidity probe information (if applicable)
 - stimulation information (if applicable)
 - time into the chiller
 - time stunned
- analyse results to verify conformance
- apply communication and mathematical skills relevant to work instructions and Standard Operating Procedures (SOPs)
- identify and apply relevant workplace health and safety, regulatory and workplace requirements

Knowledge Evidence

The candidate must demonstrate a factual, technical, procedural and theoretical knowledge of:

- the scope and nature of MSA standards
- how electrical stimulation impacts on pH decline
- impact chilling factors have on the rate of pH and temperature decline
- how the time it takes a carcase to reach the chiller can impact on the rate of pH decline
- pH and temperature window

- how cold shortening occurs and the characteristics of cold shortened product
- how heat shortening occurs and the characteristics of heat shortened product
- how other electrical inputs can impact on the rate of pH decline
- the impact the temperature of the slaughter floor can have on the rate of the pH and temperature decline
- what glycogen is and the relationship between stress and pH
- what pH is and why pH is important for eating quality

Assessment Conditions

Competency must be demonstrated over time and under typical operating and production conditions for the enterprise.

The application of competency is to be assessed in the workplace. Assessment is to occur under standard and authorised work practices, safety requirements and regulatory requirements.

As a minimum, the following three forms of assessment must be used:

- quiz of underpinning knowledge
- workplace demonstration
- workplace referee or third-party report of performance over time

Assessors must satisfy the current standards for RTOs.

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