Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 7.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCAIS302 | Process and store semen |
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| Application | This unit of competency describes the skills and knowledge required to process and store semen collected from livestock for the purpose of artificial insemination, including preparing diluent, preparing and checking temperature control equipment, assessing quality of semen batch, determining number of semen doses, , and preparing and storing semen doses.  The unit applies to individuals who collect livestock semen under broad direction, and take responsibility for their own work.  All work must be carried out to comply with workplace procedures, health and safety in the workplace requirements, animal welfare legislative, regulatory and codes of practice requirements, and sustainability and biosecurity practices.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Artificial Insemination (AIS) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare diluent | 1.1 Collect and clean containers to be used for preparation of diluent according to workplace hygiene practices  1.2 Calibrate equipment and tools used in processing semen  1.3 Heat distilled water for use in diluent to required temperature  1.4 Add distilled water to powdered diluent in correct proportions  1.5 Store diluent before use according to workplace procedures |
| 2 Prepare and check temperature control equipment | 2.1 Check temperature control equipment  2.2 Maintain temperature control equipment at required operational temperatures  2.3 Report and resolve equipment problems |
| 3 Assess quality of semen batch | 3.1 Handle semen according to workplace procedures and hygiene practices during processing  3.2 Assess motility of semen  3.3 Examine and check semen batch for contamination  3.4 Compare quality of semen batch against workplace benchmarks  3.5 Discard poor quality semen according to workplace procedures |
| 4 Determine number of semen doses | 4.1 Determine concentration of the ejaculate using appropriate equipment  4.2 Calculate number of doses according to determined concentration |
| 5 Prepare and store semen doses | 5.1 Add diluent to semen batch  5.2 Divide diluted semen into doses  5.3 Label each semen dose  5.4 Store semen doses in temperature control equipment  5.5 Assess quality of prepared doses  5.6 Record data according to workplace procedures |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Identify and interpret textual information from a range of sources to identify relevant and key information about livestock semen processing and storage operations |
| Numeracy | * Collect and record data |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCAIS302 Process and store semen  Release 2 | AHCAIS302 Process and store semen  Release 1 | Minor changes to application  minor changes to performance criteria  foundation skills added  assessment requirement updated | Equivalent |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet: <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72> |

| TITLE | Assessment requirements for AHCAIS302 Process and store semen |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  There must be evidence that the individual has processes and stored livestock semen on at least two occasions, and has:   * followed relevant workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures * followed workplace hygiene practices * prepared and selected diluent * assessed quality of semen batch * checked temperature control equipment, temperature and operational parameters before use * handled and stored semen * determined number of semen doses * dispensed, prepared, labelled and stored semen doses * recorded semen details. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * workplace requirements applicable to health and safety in the workplace for processing and storing livestock semen * environment and biosecurity legislation and regulations and workplace practices relevant to processing and storing livestock semen * workplace hygiene practices relevant to processing and storing livestock semen * principles and practices of processing and storing livestock semen, including: * methods and procedures for cleaning and sterilisation of containers, equipment and tools * calibration of equipment and tools * preparation, storage and types of diluent * types, uses, maintenance and servicing of equipment used for determining semen concentration and quality * calculation of semen doses * criteria, characteristics and methods for assessing semen quality * requirements and methods for the handling, storage, and disposal of semen * types, functions and maintenance of temperature control equipment * requirements, methods and procedures for preparing semen doses * effects and impacts of environmental conditions, equipment factors and human factors on viability of semen doses * workplace recording requirements. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * a workplace setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * work instructions and workplace procedures applicable to processing and storing livestock semen * temperature control equipment * livestock semen, and diluent * materials, tools and equipment applicable to processing and storing livestock semen * specifications: * workplace requirements applicable to health and safety in the workplace for processing and storing livestock semen * environment and biosecurity legislation and regulations and workplace practices applicable to processing and storing livestock semen * workplace hygiene practices applicable to processing and storing livestock semen * workplace practice and procedures for processing and storing livestock semen * timeframes: * according to job requirements.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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