Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 2 | This version released with AMP Australian Meat Processing Training Package Version 5.0. |
| Release 1 | This version released with AMP Australian Meat Processing Training Package Version 1.0. |

| AMPMGT506 | Manage utilities and energy |
| --- | --- |
| Application | This unit describes the skills and knowledge required to identify enterprise utilities and energy requirements, manage their use and control waste and costs.  Utilities and energy are a significant cost component in the production of meat and meat products. Their efficient use affects the quality of the product, costs and profits.  This unit is particularly applicable to maintenance, engineering, production, environment and finance personnel working in a meat industry context.  At this level individuals exercise considerable responsibility and accountability within enterprise structures and are required to make primary contributions to the values, goals and operations of the enterprise. They will typically have responsibility for establishing and reviewing systems for their site or department. They may be assisted by external experts to develop plans and strategies.  This unit must be delivered in the context of Australian meat industry standards and regulations.  No licensing, legislative or certification requirements are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector |  |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Identify enterprise utility and energy requirements and costs | 1.1 Identify utility and energy requirements for all areas and operations of the enterprise in accordance with workplace, customer and regulatory requirements  1.2 Measure current utility and energy costs and identify impact on profitability  1.3 Determine enterprise's future utility or energy requirements in accordance with enterprise goals and directions  1.4 Include utility and energy requirements and costs in all forward planning |
| 2. Monitor and control enterprise utility and energy use | 2.1 Establish performance standards and indicators using agreed benchmarks and best practice methods  2.2 Develop team commitment to utility or energy management using consultative approaches  2.3 Develop systems for the accurate monitoring of utility and energy use and costs  2.4 Audit enterprise operations to assess use, misuse and waste of utilities and energy  2.5 Monitor enterprise performance and adjust or correct systems and operations  2.6 Prepare contingency plans for failure of utility or energy supply and service  2.7 Update workplace safety systems and procedures to include requirements for safe use of utilities or energy |
| 3. Review performance and utility or energy costs | 3.1 Identify, evaluate and recommend strategies and procedures for wastage minimisation and more efficient use of utilities and energy  3.2 Assess alternative utility or energy sources and services for availability, suitability, contribution to sustainability, efficiency of operations and effectiveness of costs  3.3 Recommend appropriate utility or energy services and negotiate utility or energy supply conditions and charges  3.4 Monitor and measure enterprise utility and energy performance  3.5 Analyse and report performance information, including team feedback, to stakeholders  3.6 Prepare and implement recommendations for further improvements |

| 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. | |
| --- | --- |
| Skill | Description |
| Oral communication | * Communicate information about utility and energy management to relevant stakeholders |
| Numeracy | * Interpret and compare financial information about energy costs * Measure energy usage |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
|  | AMPMGT506 Manage utilities and energy  Release 1 |  |  |

|  |  |
| --- | --- |
| Links | Companion Volumes, including Implementation Guides, are available at VETNet: <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7> |

| TITLE | Assessment requirements for AMPMGT506 Manage utilities and energy |
| --- | --- |
| 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 on at lease one occasion:   * analysed utility or energy tariffs and charges and options available to the enterprise * communicated with internal and external personnel with diverse roles, communication skills and cultural backgrounds to determine utility or energy requirements and use * calculated and analysed enterprise utility or energy costs and their impact on production costs * consulted with personnel across the enterprise to identify and resolve utility or energy waste problems * determined current and future utility or energy requirements for enterprise operations, including analysing company goals, conducting utility or energy audits to identify consumption inefficiencies and measuring consumption and cost, including waste, against agreed benchmarks * developed performance measures and indicators for utility or energy consumption and costs, based on benchmarks and enterprise goals * developed strategies for minimising and optimising utility or energy usage, including assessing and monitoring equipment performance, introducing energy efficient plant and equipment, comparing sources and recommending utility or energy substitution, changes to procedures, and assessing and minimising non-working day use of utilities (including lighting) * evaluateed, costed and recommended alternative plant, equipment, procedures and utility or energy sources to improve efficiency, including researching sources, reviewing enterprise procedures, evaluating suitable alternatives, and calculating initial and maintenance costs and payback periods * identified and applied relevant workplace health and safety requirements * included safety requirements for use of utility or energy in workplace health and safety systems and procedures * interpreted and reviewed performance information and recommend strategies for improvement * prepared contingency plans relating to utility or energy supply failures or incidents, including emergency and safety procedures, alternative supply sources and communication strategies * prepared strategies to spread utility or energy use to avoid supplier peak demand or cost periods * prepared reports, resource proposals and recommendations in styles, formats and language appropriate for relevant audiences * presented reports according to legal and enterprise requirements * recommended utility or energy suppliers and negotiate supply and costs * researched best practice models in utility or energy assessment, planning, use and sustainability, and assessed their applicability for the enterprise * used information and communications technology, including budget and cost modelling software. | |

| Knowledge Evidence |
| --- |
| 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:   * principles and methods of heat transfer and how they impact on utility or energy use, waste and cost * concepts of base load and variable load * principles of demand control, including co-generation or outage, peak load shedding and shifting to minimise costs * use of steam generation process as an energy source for plant * cost components related to the use of utility or energy including capital, purchase, replacement and maintenance costs for plant and equipment, payback periods and net utility or energy costs * enterprise appropriate procedures and systems for measuring utility and energy use and waste * utility or energy supply status and sources available to the enterprise. |

| Assessment Conditions |
| --- |
| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions * skills must be demonstrated at an appropriate level of responsibility and authority * typical operating and production conditions for the enterprise * specifications: * access to workplace documents such as policies, procedures, processes, forms * timeframes: * sustained performance over time   .  A minimum of three different forms of assessment must be used.  Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards |

|  |  |
| --- | --- |
| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7> |