Modification history

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| Release | Comments |
| Release 1 | This version released with PPM Pulp and Paper Manufacturing Training Package Version 3.0. |

| PPMREC2XX | Monitor and control chemical recovery operations |
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| Application | This unit of competency describes the skills and knowledge required to identify, monitor, control and report on chemical recovery processes and operations.  The unit applies to production support operators who, under supervision, assist in the chemical recovery operations of a pulp and paper manufacturing facility, undertaking routine work in monitoring, identifying and solving predictable problems that occur with integrated equipment and continuous operations.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Chemical recovery operations (REC) |

| 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 to monitor chemical recovery operations | 1.1 Check production requirements at start of shift and plan work activities according to work health and safety, enviromental and standard operating procedures  1.2 Identify health and safety hazards and report safety concerns  1.3 Select and fit personal protective equipment according to safety requirements  1.4 Check tools and equipment are operational, and supplies are available |
| 2. Monitor and control processes | 2.1 Confirm operational status of chemical recovery processes by inspection, observations and other information  2.2 Monitor and control supplies of chemicals and supply systems to ensure availability and suitability  2.3 Conduct chemical recovery sampling and testing to ensure production requirements are maintained  2.4 Monitor and control production and by-product storage  2.5 Monitor and control process variables to ensure efficient operation  2,6 Carry out operator level preventative maintenance schedules according to operating procedures  2.7 Monitor and control discharges according to production requirements |
| 3. Monitor and maintain plant | 3.1 Identify routine process problems and equipment faults and rectify according to operating procedures  3.2 Undertake plant inspections to optimise plant performance  3.3 Adjust processes and equipment according to production and quality schedules and environmental requirements |
| 4. Record and document performance data | 4.1 Interpret and enter process and plant data into recording system  4.2 Communicate problems or variations with systems and environmental releases to relevant personnel |

| 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 | * Interpret information in specifications, workplace procedures and maintenance schedules |
| Writing | * Complete accurate basic records in the required format |
| Oral communication | * Provide information about problems or variations with process and equipment using clear language and industry terminology |
| Numeracy | * Interpret instruments, gauges and data recording equipment * Use measuring equipment to measure and calculate quantities * Record basic numerical data for test results and production outcomes |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| PPMREC2XX Monitor and control chemical recovery operations | PPMREC210 Monitor and control chemical recovery operations Release 2 | Element added. Changes to performance criteria, foundation skills, performance and knowledge evidence. Assessment conditions updated. | Equivalent |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-d0ac-40bc-a69e-72a600d4fd93 |

| TITLE | Assessment requirements for PPMREC2XX Monitor and control chemical recovery operations |
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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 monitored and controlled chemical recovery operations, for at least two operational intervals, including for each interval:   * completed checks on chemical processes and plant operations and responded appropriately to variations in processes and plant * completed routine maintenance on equipment * completed accurate records for process and plant faults and hazardous conditions | |

| 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 procedures relevant to work health and safety for chemical recovery operations: * use of personal protective equipment * equipment lock out and isolation procedures * handling chemicals and hazardous substances, including spill and disposal guidelines * plant clearance requirements * emergency procedures and responses * job safety analysis documentation and processes * permits and licensing requirements for facility hazards and high risk plant and equipment relevant to chemical recovery operations * workplace environmental sustainability requirements and practices for chemical operations, including workplace biotechnological applications and processes and biomass-derived products * chemical recovery plant, processes, layout and associated services including: * operating parameters * variation * associated adjustments, within level of responsibility * operation and application of electronic and other control systems to control chemical recovery operations * purpose of, and processes for sampling and testing plant and system operations * methods used to monitor chemical recovery operations against specified system parameters * effect of process adjustments on system processes and productivity during monitoring and operation * chemicals and other supplies used for chemical recovery operations * standard operating procedures specific to chemical recovery operations * procedures for communicating, recording and reporting for process and plant faults and hazardous conditions. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a pulp or paper manufacturing facility or an environment that accurately reflects performance in a workplace * resources, equipment and materials: * chemical recovery system * maintenance tools and equipment and consumables for chemical recovery plant * testing and diagnostic equipment * electronic control systems including digital control system, touch screens or robotics required for chemical recovery operations * personal protective equipment for operating chemical recovery system * proforma or recording system for recording system operation and production outcomes * specifications: * workplace and standard operating procedures relating to chemical recovery operations including health and safety, risks and hazards identification, plant isolation, quality, housekeeping and environmental requirements * maintenance schedules for chemical recovery plant.   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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