Modification history

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

| PPMRES3XX | Operate woodchip production system |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to prepare for, operate and monitor systems for woodchip production.  The unit applies to production operators who perform woodchip production operations for a pulp manufacturing facility and respond to contingencies that occur working with complex 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 | Primary Resource Operations (RES) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for woodchip production | 1.1 Identify production requirements and specifications to plan system operations and processes  1.2 Identify work health and safety hazards, assess risks and determine control measures  1.3 Identify process control points according to production specifications  1.4 Confirm availability of material supplies and cleanliness of transfer equipment  1.5 Select, fit and use personal protective equipment according to job requirements and task to be undertaken  1.6 Communicate production requirements and specifications, work health and safety and environmental requirements and operating procedures to relevant personnel |
| 2. Inspect and start up system for production run | 2.1 Carry out external inspection woodchip and control systems  2.2 Remove isolations according to work health and safety and operating procedures  2.3 Carry out pre startup checks on equipment, conveyors, transfer system and operational monitoring equipment  2.4 Confirm that monitoring devices and alarm systems are operational  2.5 Identify logs to be processed and loaded according to production requirements  2.6 Handle transfer equipment, bins and hoppers to ensure prevention of chip contamination  2.7 Start up system production according to work health and safety and operation procedures  2.8 Dock logs according to production requirements |
| 3. Monitor and maintain chipping system operation | 3.1 Monitor logs and conveyors to achieve optimum operation flow  3.2 Co-ordinate and maintain supply of logs to ensure production requirements are met  3.3 Inspect and use electronic monitoring of operating equipment to ensure operating conditions are continually maintained  3.4 Identify potential blockage and jamming situations and take appropriate action to rectify  3.5 Monitor woodchip quality to specifications  3.6 Monitor and maintain woodchip transfer to storage system  3.7 Monitor and maintain storage levels as required |
| 4. Implement and monitor system shutdown | 4.1 Coordinate and communicate planned shutdown of chipping system operations to relevant personnel  4.2 Shut down plant or system according to productivity, work health and safety and environmental requirements and operating procedures  4.3 Monitor functionality of equipment during shutdown  4.4 Implement isolation requirements according to operating and housekeeping procedures |
| 5. Respond to unplanned shutdown | 5.1 Respond to unplanned faults and stoppages according to operating, emergency and workplace health and safety procedures  5.2 Complete shutdown and isolation according to operating procedures  5.3 Locate and rectify cause of unplanned shutdown within area of responsibility  5.4 Communicate shutdown information to relevant personnel |
| 6. Record and report production information | 6.1 Record production and quality data and system operation information according to workplace requirements  6.2 Report problems or variations with production, quality and system 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. | |
| --- | --- |
| Skill | Description |
| Reading | * Interpret information from workplace procedures and documentation |
| Writing | * Complete records accurately and legibly using clear language and industry terminology |
| Oral communication | * Provide information about start up and shut down operations, problems or variations with production, quality and system using clear language and industry terminology |
| Numeracy | * Interpret numerical settings on instruments, gauges and data recording equipment * Record numerical data for system and operational performance |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| PPMRES3XX Operate woodchip production system | PPMRES210 Prepare and operate the woodchip production system | Two elements added. Changes to unit title, performance criteria, foundation skills, performance and knowledge evidence. Assessment conditions updated. | Not equivalent |

|  |  |
| --- | --- |
| 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 PPMRES2XX Operate woodchip production system |
| --- | --- |
| 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 planned for, coordinated, and safely started up and shut down a woodchip production system for at least two operational intervals, including for each operational interval:   * determined and monitored process control points * monitored, assessed causes and adjusted systems to rectify variations from specifications and unplanned shutdown * used and interpreted electronic control systems during operations * applied hygiene and safe handling of equipment and materials * recorded and reported accurate operational data * communicated effectively and worked safely with others when undertaking woodchip production operations. | |

| 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:   * workplace and legislative health and safety requirements relevant to performing woodchip production operations, including emergency procedures, handling chemical and hazardous substances, high risk load shifting, licensing requirements, plant clearance and permit systems * relevant workplace and legislative environmental sustainability requirements and practices for woodchip production operations, including workplace biotechnological applications and processes and biomass-derived products * methods used to identify and manage hazards and risks that apply to woodchip production operations * woodchip production systems and processes, plant layout and associated services relevant to carrying out startup, stabilising and shut down activities * standard operating procedures specific to woodchip production operations * types of, uses and characteristics of raw materials to produce woodchip product and how they influence paper properties * quality requirements for different types of woodchip products * purpose of, and processes for sampling and testing product quality, plant and system operations * methods used to monitor woodchip production system operations against specified system parameters * effect of process adjustments on product quality and productivity during operation * application of electronic and other control systems used to operate, control and make appropriate adjustments to woodchip production operations * responses used for unplanned shutdowns, including those caused by power outage, mechanical breakdown, blockages, jamming, air supply and control system failure. * procedures for communicating, recording and reporting for system operation, production outcomes and equipment faults. |

| Assessment Conditions |
| --- |
| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a pulping manufacturing facility or an environment that accurately represents workplace conditions * resources, equipment and materials: * woodchip production system and plant * maintenance tools and equipment and consumables for woodchip production plant * electronic control systems which include digital control system, touch screens or robotics used in woodchip production systems * materials and equipment used in woodchip production processes * personal protective equipment required for operating woodchip production systems * proforma or recording system for recording system and production data and information * specifications: * workplace and standard operating procedures relating to woodchip production operations including health and safety, risks and hazards identification, plant isolation, quality, housekeeping and environmental requirements * relationships: * relevant personnel for the purposes of communicating information. * 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.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-d0ac-40bc-a69e-72a600d4fd93 |