Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 5.0 |

| FBPOPR3X15 | Operate a bulk liquid transfer process |
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| Application | This unit of competency describes the skills and knowledge required to receive and load out bulk liquid product or raw materials.  This unit applies to individuals transferring bulk liquid product and materials from tankers and between storage and production storage facilities.  All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.  No occupational licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Operational (OPR) |

| 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 for bulk materials transfer work | 1.1 Confirm work instructions from and clarify where required  1.2 Identify health, safety and food safety hazards for the bulk liquid transfer process and inform supervisor  1.3 Wear appropriate personal protective equipment and ensure correct fit  1.4 Identify tank locations, and product and materials holdings and capacities  1.5 Confirm actual-to-recorded holding levels |
| 2. Prepare bulk liquid transfer equipment and process for operation | 2.1 Inspect condition of tank farm and related equipment and identify and report maintenance requirements  2.2 Select transfer equipment settings and operating parameters to meet safety and transfer requirements  2.3 Carry out checks and tests, and follow other materials and product clearance procedures prior to transfer  2.4 Establish the priorities for materials transfer to match intakes and transfers to storage capacity and production requirements |
| 3. Transfer bulk liquid materials | 3.1 Start and operate the transfer process according to work health and safety and operating requirements  3.2 Monitor the transfer process to confirm correct location selection, quantities and equipment settings  3.3 Transfer bulk liquid materials and product to the required location or storage facility  3.4 Maintain a clean and tidy workplace according to health, safety and food safety procedures  3.5 Maintain workplace records in required format  3.6 Conduct work according to workplace environmental guidelines |
| 4. Complete transfer operations | 4.1 Position valves and related equipment settings to complete transfer operation  4.2 Purge product and materials from lines according to workplace procedures  4.3 Clean and prepare equipment for further transfer  4.4 Record information on the transfer operation in required format  4.5 Identify and report maintenance activities according to workplace requirements |

| 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 |
| Learning | * Plan and sequence steps in transfer process |
| Reading | * Identify product and other transfer requirements from order forms * Read system information from control screens * interpret workplace procedures |
| Writing | * Record data and observations using electronic, digital and/or paper-based format |
| Numeracy | * Interpret system process control data, capacities, quantities and product levels (L, hL) |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPOPR3X15 Operate a bulk liquid transfer process | FBPOPR2008 Operate a bulk liquid transfer process | Minor changes to Performance Criteria for clarity  Foundation skills refined  Performance Evidence clarified  Minor changes to Knowledge Evidence and Assessment Conditions  AQF level in code updated to better match complexity of work task | Equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4> |

| TITLE | Assessment requirements for FBPOPR3X15 Operate a bulk liquid transfer process |
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| Performance Evidence | |
| An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.  There must be evidence that the individual has received and loaded out at least one bulk liquid product or raw material, including:   * applying safe work procedures * following food safety procedures * inspecting equipment for signs of wear, including visual inspections to detect leaks, listening for unusual noises and/or vibrations in pumps, and checking gauges and meters * using workplace records and systems to confirm tank holdings and capacities and determining appropriate source/destination holding facilities, including verifying by physically inspecting storage facilities and checking materials/product compatibility * preparing equipment for materials transfer, including confirming that equipment is clean, lines are purged, isolation or lock-outs are cancelled as required, any scheduled maintenance has been completed, and safety guards/equipment are correctly positioned * operating and monitoring transfer process to confirm that correct quantities are transferred at the required times, to the required locations, including monitoring pump loads and flow rates, and filter/strainer condition * completing transfer operations, including purging lines and selecting appropriate equipment/system settings * taking corrective action to address transfer issues. | |

| 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:   * bulk liquid materials storage facilities layout and related management systems * basic operating principles of the system and equipment used, including the features of the bulk liquid handling system * good manufacturing practices (GMP) relevant to work task * equipment used, including sensors, valves, pumps, pipework and other related equipment that controls the flow and transfer of bulk liquid materials, equipment operating capacity and the status and purpose of guards * planning and scheduling systems and responsibilities to prioritise materials transfer processes, including characteristics of materials received and related storage requirements, production requirements and storage capacities * signs and symptoms of faulty equipment and early warning signs of potential problems * operating parameters and corrective action required where operation is outside specified operating parameters * health and safety hazards and controls, including emergency procedures to respond to hazardous situations * product inspection procedures within level of responsibility * clearance procedures, including relevant test methods and action required if results are not within specification or clearance is not provided * contamination/cross contamination and food safety risks associated with the process and related control measures * isolation, lock-out and tag-out procedures and responsibilities * environmental issues associated with bulk liquid materials transfer, including consequences of spills and appropriate control/containment procedures * basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment * workplace cleaning and sanitation procedures required for the bulk liquid transfer process * recording requirements and procedures for the bulk liquid transfer process * recording requirements to ensure traceability of product. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective clothing and equipment * bulk transfer system, equipment and services * bulk materials (liquid) * receival schedules and sequencing systems * sampling equipment as required * documentation and recording requirements and procedures * cleaning materials and equipment * specifications: * work roles and responsibilities, training and career information * work procedures, including advice on safe work practices, food safety, quality and environmental requirements * sampling schedules and test procedures * storage capacities and bulk receival equipment capacity and operating parameters.   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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