Modification history

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

| FBPOIL3XX6 | Operate and monitor a soap splitting process |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to operate, monitor, adjust and shut down a soap splitting process. It covers the splitting of soap stock into an acid oil stream and an acid water stream. This may also be referred to as an acid oil process.  This unit applies to individuals who apply basic operating principles to the operation and monitoring of a soap splitting process in an edible oils production environment.  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 | Oil refining (OIL) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare the soap splitting and related equipment for operation | 1.1 Confirm soap stock is available to meet product recipe requirements  1.2 Identify safety requirements and wear appropriate personal protective clothing and equipment ensuring correct fit  1.3 Confirm equipment has been cleaned and is not locked out  1.4 Fit and adjust machine components and related attachments according to operating requirements  1.5 Acknowledge and load recipe to meet production requirements  1.6 Conduct pre-start checks according to operator instructions |
| 2. Operate and monitor equipement | 2.1 Start up and operate the soap-splitting process according to safe operating procedures  2.2 Ensure equipment and hoses are placed for optimal operations and to ensure safety  2.3 Monitor equipment and services to ensure optimal operations  2.4 Identify and report irregularities in equipment operation and report any maintenance requirements  2.5 Confirm that specifications are met at each stage according to production processing specifications  2.6 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures  2.7 Maintain the work area according to workplace guidelines  2.8 Test finished samples to ensure product meets specifications  2.9 Enter workplace records in required format |
| 3. Shut down the soap splitting process | 3.1 Identify the appropriate shutdown procedure  3.2 Shut down the process safely according to operating procedures  3.3 Identify and report maintenance requirements according to workplace requirements  3.4 Ensure waste is disposed of in line with environmental 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. | |
| --- | --- |
| Skill | Description |
| Learning | * Solve routine problems according to workplace guidelines and using experience of past solutions |
| Reading | * Interpret standard operating procedures for the soap splitting process |
| Writing | * Complete processing records using electronic, digital and/or paper-based formats |
| Numeracy | * Monitor control points for pH and temperature of reactors and acid water * Read gauges and scales * Inspect and monitor tank levels |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPOIL3XX5 Operate and monitor a soap splitting process | FBPGPS2009 Operate a soap splitting process | Unit title and code updated to better match work task  Minor changes to Performance Criteria to clarify intent  Foundation skills refined  Performance Evidence clarified  Minor changes to Knowledge Evidence and Assessment Conditions | Equivalent unit |

|  |  |
| --- | --- |
| 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 FBPOIL3XX5 Operate and monitor a soap splitting process |
| --- | --- |
| 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 operated and monitored a soap splitting process to split at least one batch of soap stock into an acid oil stream and an acid water stream, to meet product specifications, including:   * applying safe work practices * taking corrective action in response to typical faults and inconsistencies. | |

| 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:   * purpose and basic principles of soap splitting, including an understanding of the process used to split soap stock and the end uses of each stream * basic operating principles of equipment, including: * main equipment components * status and purpose of guards * equipment operating capacities and applications * the purpose and location of sensors and related feedback instrumentation * services required for a soap splitting process and action to take if services are not available * good manufacturing practices (GMP) relevant to work task * the flow of this process and the effect of outputs on downstream processes, including: * the impact of acid water pH on the performance of the effluent plant * impact of allowing 'fatty' acid water to flow downstream * requirements of acid oil and acid water streams to be achieved * the effect of variation in soap stock on the soap splitting process * operating requirements and parameters, and corrective action required where operation is outside specified operating parameters * typical equipment faults and related causes, including: * signs and symptoms of faulty equipment * early warning signs of potential problems * methods used to monitor the production process, including the purpose and methods used to conduct relevant tests (including pH, moisture and Free Fatty Acids tests) * contamination/cross contamination and food safety risks associated with the process and related control measures * common causes of variation and corrective action required * health and safety hazards and controls, including hazards associated with handling hazardous substances * safe handling and manual handling procedures * requirements of different shutdowns as appropriate to the process and workplace production requirements, including: * emergency and routine shutdowns * procedures to follow in the event of a power outage * isolation, lock out and tag out procedures and responsibilities * procedures and responsibility for reporting production and performance information * environmental issues and controls relevant to the process, including waste or rework collection and handling procedures related to the process * basic operating principles of process control, including the relationship between control panels and systems and the physical equipment * routine maintenance procedures for soap splitting equipment * cleaning procedures for soap splitting equipment * product traceability procedures. |

| Assessment Conditions |
| --- |
| 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: * soap splitting equipment and services * materials to be processed * personal protective clothing and equipment * sampling schedules and test procedures and equipment * cleaning materials and equipment * specifications: * work procedures, including advice on safe work practices, food safety, quality and environmental requirements * information on equipment capacity and operating parameters * production schedule/batch details, control points and processing parameters * documentation and recording requirements.   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=78b15323-cd38-483e-aad7-1159b570a5c4 |