

Modification history

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

FBPOPR2045X	Operate pumping equipment
Application	<p>This unit of competency describes the skills and knowledge required to set up, operate and monitor pumping equipment.</p> <p>This unit applies to individuals who work under general supervision and in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of pumping and associated equipment.</p> <p>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.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Operational (OPR)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare pumps for operation	1.1 Confirm pumps and related equipment are available to meet operating requirements 1.2 Wear appropriate personal protective clothing and ensure correct fit 1.3 Carry out pre-start checks on pumps and related equipment according to safe work procedures 1.4 Select appropriate settings to meet safety and production requirements 1.5 Monitor and maintain condition of pumps and related equipment, and identify and report maintenance requirements according to workplace reporting requirements
2. Monitor pump operation	2.1 Start and monitor pumps and related equipment to identify variation in operating conditions 2.2 Take corrective action to maintain pump operation within equipment capacity and operating parameters
3. Complete pump operation	3.1 Prepare pumps for cleaning and/or maintenance according to health, safety and food safety requirements 3.2 Conduct work in accordance with workplace environmental guidelines 3.3 Maintain the work area according to workplace procedures 3.4 Maintain workplace records according to workplace procedures

Foundation Skills	
<i>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.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> • Interpret standard operating procedures relevant to job task • Interpret pumping requirements
Writing	<ul style="list-style-type: none"> • Record operating, routine maintenance and shutdown information using electronic, digital and/or paper-based formats
Oral communication	<ul style="list-style-type: none"> • Report operational and safety information to relevant personnel
Numeracy	<ul style="list-style-type: none"> • Monitor and interpret pumping control indicators, including amperage, speed and flow rates • Monitor supply and flow of materials to and from the pump

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2045X Operate pumping equipment	FBPOPR2045 Operate pumping equipment	Minor changes to Performance Criteria to clarify task Foundation skills refined Performance Evidence clarified Minor changes to Knowledge Evidence to clarify requirements 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 FBPOPR2045X Operate pumping equipment
Performance Evidence	
<p>An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.</p> <p>There must be evidence that the individual has operated pumping equipment to effectively transfer at least one batch of product, including:</p> <ul style="list-style-type: none"> • applying safe work procedures • following food safety procedures • conducting pre-start checks, including: <ul style="list-style-type: none"> • inspecting pump flanges, gaskets and seals to identify any signs of wear • checking related valve assemblies to identify any signs of leaks • cancelling isolation or lock-outs (where pumps have variable settings that involve selecting appropriate settings and confirming that related pipework is correctly configured for pumping requirements) • monitoring and adjusting pump operation, including identifying variation in amperage and adjusting pump speeds/flow rates to meet pumping requirements • addressing routine operational issues. 	

Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • basic operating principles of pumps and related equipment, including: <ul style="list-style-type: none"> • main pump components • status and purpose of guards • pump system configuration, including valves, taps and hoses or pipework • the effect of pumping system design on operating performance, including flow resistance, pressure and head • operating capacities of pumps used in the work area, including different pump types to perform pumping operations • effect of raw material characteristics on pump performance, including variables that include soluble solids, temperature and viscosity • effect of pump operating parameters on product/materials pumped • corrective action required where pump operation is outside specified operating parameters • typical equipment faults and related causes relevant to operating pumping equipment, including: <ul style="list-style-type: none"> • signs and symptoms of faulty equipment • early warning signs of potential problems • services required • isolation, lock-out and tag-out procedures and responsibilities required for operating pumping equipment • contamination/cross contamination and food safety risks associated with pumping and related control measures • health and safety hazards and controls relevant to operating pumping equipment • procedures and responsibility for reporting problems • environmental issues and controls, including action required in the event of significant leaks or spills • basic operating principles of process control, including the relationship between control panels and systems and the physical equipment • cleaning procedures required for operating pumping equipment. 	

Assessment Conditions	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • a workplace or an environment that accurately represents workplace conditions • resources, equipment and materials: 	

Assessment Conditions	
<ul style="list-style-type: none">• pump, hoses and related equipment and services• personal protective clothing and equipment• product to be pumped• cleaning materials and equipment• specifications:<ul style="list-style-type: none">• work procedures, including advice on safe work practices, food safety, quality and environmental requirements• information on 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.	
Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4

DRAFT