SITHFAB301 Operate and monitor cellar systems
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Modification History
The version details of this endorsed unit of competency set are in the table below. The latest information is at the top.

<table>
<thead>
<tr>
<th>Version</th>
<th>Comments</th>
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<tr>
<td>1.0</td>
<td>E</td>
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<tr>
<td></td>
<td>Replaces and is equivalent to SITHFAB227A Operate and monitor cellar systems. Re-worked Elements, Performance Criteria, Required Skills and Knowledge to more fully articulate content.</td>
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Unit Descriptor
This unit describes the performance outcomes, skills and knowledge required to work safely in a cellar. It requires the ability to operate and maintain beverage dispensing systems, and monitor refrigeration systems, the overall safety of cellar operations and the quality of beverage products.

Application of the Unit
Cellar covers any area used as the storage location for bulk beverages and the equipment that supports its service. This unit applies to hotels, clubs, casinos and sporting venues, but is also relevant to restaurants, or any other permanent or temporary catering venue where a cellar is maintained.
This unit applies to any person who has responsibility for the operation and monitoring of a cellar. They may be a dedicated cellar person, a senior bar attendant, a manager or a business owner and they sometimes have stock control responsibilities.

Licensing/Regulatory Information
Safety issues and compliance requirements are a key focus of the unit. These reflect compliance requirements under Occupational Health and Safety (OHS) or Work Health and Safety (WHS) legislation and obligations under Australian Standard AS 5034-2005 Installation and use of inert gases for beverage dispensing.

Pre-Requisites
Not applicable.
Employability Skills Information

This unit contains employability skills.
## Elements and Performance Criteria Pre-Content

**Elements and Performance Criteria**

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

<table>
<thead>
<tr>
<th>1. Operate and maintain beverage dispensing systems.</th>
<th>1.1 Operate beer systems according to manufacturer instructions and relevant safety requirements.</th>
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<tbody>
<tr>
<td></td>
<td>1.2 Tap kegs according to safety requirements and manufacturer instructions.</td>
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<td>1.3 Handle, connect and store beverage gas according to relevant safety standards.</td>
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<td>1.4 Check post mix systems for effective operation and change syrup boxes as required.</td>
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<td>1.5 Clean beverage system parts in accordance with manufacturer instructions and safety requirements.</td>
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<td>1.6 Use chemicals safely according to product instructions.</td>
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<td>1.7 Correct or report dispensing system faults to the appropriate person according to scope of individual responsibility.</td>
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<thead>
<tr>
<th>2. Use and monitor refrigeration systems.</th>
<th>2.1 Monitor and accurately measure refrigeration system, and adjust to comply with product requirements.</th>
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<tr>
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<td>2.2 Perform routine checking of glycol levels and cleaning of vents, ensuring safe use of chemicals at all times.</td>
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<td>2.3 Promptly identify refrigeration faults and report to qualified refrigeration mechanic according to organisational procedures.</td>
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<thead>
<tr>
<th>3. Monitor overall cellar safety.</th>
<th>3.1 Make regular routine checks of gas systems according to relevant safety standards.</th>
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<td>3.2 Systematically monitor the use and storage of chemicals and ensure safety requirements are met.</td>
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<td>3.3 Monitor the cellar area for safety signage and take action to rectify any deficiencies.</td>
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<td>3.4 Proactively provide relevant information about safety issues to other workers.</td>
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<thead>
<tr>
<th>4. Monitor quality of beverage products.</th>
<th>4.1 Monitor cellar temperature to ensure optimum storage conditions for different beverage products.</th>
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<td>4.2 Systematically check cellar conditions to ensure the requirements of the Australia New Zealand Food Standards (ANZFS) Code are met.</td>
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<td>4.3 Use systematic product rotation to maintain quality.</td>
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<td>4.4 Use manual or electronic stock control system to monitor</td>
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</table>
quality of products and control stock during receiving, storage and issuing.

4.5 Test the quality of beverage products regularly and identify faults.

4.6 Take appropriate action to rectify faults within scope of individual responsibility or report to the appropriate person.
Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills to make accurate verbal reports on dispensing system faults
- critical thinking skills to evaluate the operational efficiency of all cellar systems and implement systematic changes to improve operations
- literacy skills to:
  - read and interpret:
    - ANZFS codes
    - complex manufacturer’s instructions for the operation of a range of cellar equipment
    - logbook entries
    - Material Safety Data Sheets (MSDS)
    - safety procedures and signs
    - stock control system records
  - write reports on faulty equipment, document measurements of all equipment calibrations and complete logbook entries for testing and checking activities
- numeracy skills to:
  - accurately calculate complex calibrations of a range of cellar equipment
  - calculate the dilution requirements for chemicals and cleaning products
  - measure temperatures for the storage of cellar stock items
- planning and organising skills to systematically monitor cellar conditions and the operational efficiency and safety of all cellar equipment
- problem-solving skills to identify faults in operational cellar systems and adjust equipment to rectify faults
- self-management skills to manage own speed, timing and productivity
- teamwork skills to provide practical information about cellar issues to colleagues
- technology skills to work with equipment at an operational and basic maintenance level.

Required knowledge

- key requirements of cellar compliance laws, including:
  - Health Act
  - OHS or WHS legislation
  - Food Standards Australia New Zealand (FSANZ) Act 1991
- primary elements of the ANZFS Code that directly impact on cellar operations
- full requirements of Australian Standards that directly impact on cellar operations:
  - AS5034-2005 Installation and use of inert gases for beverage dispensing, and associated standards
  - AS3780-1994 The storage and handling of corrosive substances
- operational features of beverage gas systems, including:
• key components of beverage dispensing systems for beer and post mix syrups
• isolating gas board
• monitoring alarms
• monitoring of regulator pressures
• types of beverage gases
• how to handle, store, connect and disconnect beverage gas cylinders (including different types of cylinder systems and different types of gas)
• inert gas in confined spaces and the potential dangers
• particular dangers of carbon dioxide and nitrogen
• required fire protection equipment and other emergency and alarm procedures
• methods and techniques for undertaking routine checks for gas leaks (including monitoring of regulators, drop tests, spray tests, disconnecting and re-connecting leads)
• typical roles and responsibilities of different people in operating and maintaining the system including those within the hospitality establishment and external contractors
• operational features of refrigeration systems including:
  • chiller plates
  • compressors
  • glycol system or refrigerated beer line system
  • glycol tanks and pumps
• safe manual handling techniques for lifting and shifting heavy items
• procedures and safety requirements for the use and storage of hazardous substances such as chemicals and other cleaning agents
• content of labelling and material safety data sheets for hazardous substances
• correct and environmentally sound disposal methods for hazardous substances
• overview information on the way that beer is brewed and what this means for cellar operations
• cellar products, which must include beer, and their characteristics, including:
  • correct handling and storage
  • shelf life
  • potential faults.
Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the ability to:

- safely operate and maintain beverage dispensing systems within a cellar environment
- monitor refrigeration systems and the overall safety of cellar operations
- systematically check cellar conditions and the quality of cellared beverages
- monitor cellar operations over a stock delivery cycle
- integrate knowledge of:
  - operational features of beverage gas systems
  - operational features of refrigeration systems
  - Australian Standards that directly impact on cellar operations.

Context of and specific resources for assessment

Assessment must ensure use of:

- an operational commercial cellar with the fixtures, large and small equipment and workplace documentation defined in the Assessment Guidelines for cellars; this may be a:
  - real industry workplace
  - simulated industry environment such as a training bar and cellar servicing customers
- industry-realistic ratios of bar staff to customers
- a wide commercial range of bar stock including wines, beers, spirits, liqueurs, post mix syrups and non-alcoholic beverages
- workplace and other documentation:
  - AS5034-2005 Installation and use of inert gases for beverage dispensing, and associated standards
  - AS3780-1994 The Storage and handling of corrosive substances
  - ANZFS Code or plain English documents issued by national, state or territory government regulators
  - MSDS for hazardous substances used in cellars
  - current commercial policies and procedures used for the operation of cellars
• an industry manual or electronic stock control system.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

• direct observation of the individual operating and monitoring cellar systems including a bulk dispensing and refrigeration system for a whole shift
• evaluation of documents produced by the individual:
  • fault reports
  • temperature checks
  • maintenance log books
  • stock control records
• direct observation of the individual carrying out maintenance of beverage system parts
• written or oral questioning to assess knowledge of:
  • operational features of beverage gas systems
  • operational features of refrigeration systems
  • Australian Standards that directly impact on cellar operations
• review of portfolios of evidence and third-party workplace reports of on-the-job performance by the individual.

Guidance information for assessment

The assessor should design integrated assessment activities to holistically assess this unit with other units relevant to the industry sector, workplace and job role, for example:

• SITHFAB202 Operate a bar
• SITXINV201 Receive and store stock
• SITXINV301 Purchase goods
• SITXINV401 Control stock
• SITXWHS101 Participate in safe work practices
• SITXWHS301 Identify hazards, assess and control safety risks.
Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Beer systems** may include:
- approved cleaning keg or dosing unit
- direct pull systems
- flow back systems
- ice bank systems
- multiple hook-up
- party kegs
- refrigerated beer line systems
- Temprite or instantaneous cooler system.

**Safety requirements** may relate to:
- chemical and detergent use, including manual or a dosing unit detergent system
- conducting risk assessments
- correct lifting, moving and handling techniques for kegs and cylinders
- correct servicing and maintenance of equipment which operate under pressure e.g. connectors and couplers
- dealing with pressure factors
- legislative requirements
- requirements under Australian Standards
- safe use of electrical equipment.

**Beverage system parts** include:
- beer lines
- beer pumps
- beer taps
- connectors
- couplers
- foam on beer (FOB) detectors
- manifolds
- transfer leads.

**Chemicals** may include:
- ‘Corrosive 8’ detergents
- general cleaning agents
- low pH detergents
- one-part detergent solutions
- specialised-part cleaning agents
- two-part detergent solutions.

**Dispensing systems** include:
- beer
- frozen drink dispensers
post-mix syrups
spirits
wine.

Refrigeration systems include:
cabinets
chilled beer fonts
chiller plates
cold rooms
compressors
cool room
glycol system or refrigerated beer line system
glycol tanks and pumps
ice bank or water chilled system
portable systems
Temprite or instantaneous cooler system
glycol system or refrigerated beer line system.

Gas systems include:
alarms
beverage gases
gas cylinders
gas regulators
isolating gas board.

Beverage products may include:
aerated and mineral waters
ancillary cellar products (e.g. paper products)
bulk and packaged beers
juices and syrups
liqueurs
post-mix
spirits
wine.

Faults may include:
cloudy beer
flat beer
heady beer
no or slow beer flow
sour beer.

Appropriate action to rectify faults may include:
checking for gas leaks (e.g. drop tests, spray tests)
checking, identifying fault and adjusting:
gas systems
refrigeration systems
cleaning and maintaining equipment
cleaning of lines and equipment
controlling and rotating stock
monitoring:
• compliance with AS5034 requirements
• gas system alarms
• regulator pressures.

Unit Sector(s)
Hospitality

Competency Field
Food and Beverage