

# Artisanal Food & Beverage Project



## Summary of Feedback, Responses and Actions on qualifications, skill sets and units

May 2019

Draft qualifications, units of competency and skill sets for the Artisanal Food & Beverage project were made available on the [Skills Impact website](#) for stakeholder review from 29 January – 4 March 2019 and then again for an additional period from 8 – 30 April 2019. Please [Visit the website](#) to view a full list of the documents that were submitted for consultation during these phases. Feedback was received from a variety of stakeholders around the country via email, the Skills Impact Feedback Hub, at face-to-face workshops and webinars, via phone and email, as follows:

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	National
<b>Industry</b>									
<b>Registered Training Organisation (RTO)</b>									
<b>Government department</b>									
<b>Industry Associations</b>									**
<b>Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM)</b>			**						

\*\* Note: Feedback received from a national industry association and an Industry Training Advisory Body confirming few to no relevant stakeholders in the Northern Territory.

Feedback received during the 'drafts available' periods for the qualifications, units of competency and skill sets that have been developed for cheese making, brewing, distilling and fermenting has been positive, with minor changes or updates suggested by stakeholders.

Some aspects of the qualifications and content of some units of competency were identified as not quite yet meeting industry needs. Following feedback from stakeholders and input from subject matter experts, the following changes have been made to the documents:

- Redesigned units in the distilling sector and addition of new units to address the various methods and equipment used to distil beverages.
- Core units have been updated in the *FBP5XX19 Diploma of Artisan Cheese Making*.
- Proposed new skill set *FBPSSXXX9 Produce Artisan Fermented Food Skill Set* has been abandoned due to similarities with another proposed skill set, *FBPXXX4 Artisan Food and Beverage Fermented Skill Set*, the latter being the more flexible and suitable skill set that will progress through the remainder of the project.
- Specific content identified for inclusion in Companion Volume Implementation Guide to support delivery and assessment of new artisanal documents.

Since the second consultation phase (8-30 April 2019), the following additional changes have been made to the Certificate IV qualification based on feedback and comments received:

- The *fermentation* sector reinstated and renamed to 'Food and non-alcoholic beverages.'
- Title changed again to help address broad coverage of qualification. Now titled *Certificate IV in Fermented Food Products*.
- To ensure all units of competency in the core of the qualification are relevant to each of the specialisations covered (i.e. brewing, distilling, and fermenting food and non-alcoholic beverages), the unit *FBPFST5XX1 Identify the microbiological and chemical properties of fermented foods* has been moved to the elective bank.

Lastly:

- Units identified as not being suitable for inclusion in artisan qualifications have been removed from the project.
- Units of competency that were identified in early stages as being suitable for inclusion in the new qualifications that did *not* receive feedback or require changes have been removed from the project.

Below is a summary of the issues raised for the draft qualifications, units of competency and skill sets developed and reviewed for the Artisanal Food and Beverage project, and how these issues have been dealt with. This involves a consideration of the information provided, views of industry stakeholders and from people who are part of the Subject Matter Expert Working Group process. Resolutions are constructed to consider the needs and views of stakeholders to the extent possible, and to comply with the *Standards for Training Package 2012*. The resolutions may represent a compromise on one or more stakeholder views with the aim of a workable outcome for industry, State and Territory Training Authorities (STAs) and training providers.

Validation drafts are available to view on the [Skills Impact website](#) from **16 May** to **30 May 2019**.

Please use the menu below to navigate to the feedback you wish to view.

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## Summary of feedback on draft of *FBP4XX19 Certificate IV in Artisan Fermented Food & Beverages*

(now named FBP4XX19 *Certificate IV in Artisan Fermented Products*)

Note: This feedback received during the second “Drafts Available” phase 8 – 30 April 2019. To view feedback from the first “Drafts Available” phase from 29 January – 4 March 2019 refer to [Appendix 1 – First summary of feedback for Certificate IV](#).

### Comments related to Core Units

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, Vic	New core units are much more suitable. Legal requirements unit is good to have.	Great - that's good to know - thank you.
• RTO, Vic	Level 5 HACCP unit – even though not all learners will be responsible for developing a HACCP plan in their organisation, developing a HACCP plan allows the learner to look at every step of the process, and to analyse where the highest risks are. This makes you look at every part of the process, which is extremely relevant for learners. There may be concerns from others about this unit being included in the core but would argue it's still very important to do.	Great - thanks for the confirmation
• RTO, Vic	<i>RE: removal of MEMENV272 Participate in environmentally sustainable work practices from core of qualification.</i> Agree embedding environmental sustainability in other units and having this unit as an elective could work.	Great - thanks for the confirmation
• Industry, Vic	Support moving environmental unit in to elective bank as long and environmental sustainability is embedded in the units.	Thanks for the confirmation. Yes - environmental sustainability covered across the practical units
• RTO, SA	manage and propagate yeast should be an elective unit not a core unit - it is not relevant to all streams	Other subject matter experts have advised that all candidates should have knowledge of managing and propagating yeast.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• RTO, Vic</li> </ul>	<p><i>RE: core unit</i> FBPF5001 Develop a HACCP-based food safety plan</p> <p>In Victoria, breweries are not required to have a food safety plan. Fundamentally we think this unit still has a place because it forces the microbrewer to analyse all hazards and risks to their product. It is not uncommon for no CCP's to exist and this unit requires a minimum of 4 CCP's to be incorporated in the plan. So the skill may not be able to be met. What sets beer apart from most other products is that if quality is not maintained from raw material, processing, packaging, you will be left with a nonviable product every time. It won't meet chemical or sensory specs.</p>	<p>The HACCP unit and the sensory analysis and raw materials unit/s address the broad quality requirements of the end product.</p> <p>As above feedback notes, the skills and knowledge obtained through developing a HACCP plan are extremely relevant. In addition, multiple stakeholders provided feedback during consultation requesting this unit be more core. (See <a href="#">Appendix 1</a>).</p>
<ul style="list-style-type: none"> <li>• RTO, Vic</li> </ul>	<p>In brewery, quality is your best defence however there are no dedicated quality units in the core section.</p>	

### Comments related to Elective Units – Brewing Specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), WA</li> </ul>	<p><i>RE: units in Brewing specialisation</i></p> <p>I can see nothing here about developing a recipe or concept for an artisanal beer and actually brewing it. Surely this is core?</p>	<p>References to 'recipes' have been mostly removed and replaced with references to requirements of the end product and understanding of how techniques/materials effect the end product. Artisan producers inform us that this is how they work.</p> <p>Further, not all learners will be starting their own artisanal brewing facility, so the inclusion of this content will not be relevant to all. However, these skills and knowledge could be obtained by importing unit <i>FBPFST5008 Develop a new food product</i>.</p>
<ul style="list-style-type: none"> <li>• RTO, Vic</li> </ul>	<p><i>RE: FBPTec4XX2 Manage wort production unit in Brewing specialisation</i></p> <p>Previous comments on this unit are still relevant as many</p>	<p>Yes - FBPTec4XX2 has been updated in line with feedback received through stage 1 (references to specific equipment removed). All these</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	microbrewers would use a mash/lauter combination. So I am assuming that will be revised?	components will be available soon for further feedback. (refer to specific feedback on this unit in the sections below).
<ul style="list-style-type: none"> <li>• RTO, Vic</li> </ul>	<p><i>RE: FBPTEC4XX3 Manage cellar operations unit in Brewing specialisation</i></p> <p>This unit also had comments on it to remove the filtration part and make is separate. We can see there is a new unit below but we are assuming this one is also being revised?</p>	Yes - FBPTEC4XX3 also revised in line with feedback from stage 1. (See <a href="#">Appendix 1</a> )

### Comments related to Elective Units – Distilling Specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), WA</li> </ul>	<p><i>RE: units in Distilling specialisation</i></p> <p>I can see nothing here about flavouring and colouring of spirits. 99% of spirits are flavoured (flowers, coffee, fruit, cream and wood) and many have added sugars/malt.</p>	The units include reference to botanicals, which are added to a section of the still when brewing certain spirits (see 'Manage still operations'. The wood flavour comes from the barrels see 'Prepare, fill and store barrels for aging spirits'. Other flavours added when blending - see 'Blend spirits'.

### Comments related to Elective Units – Fermenting Specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• RTO, SA</li> </ul>	<p>why has the fermented food stream been deleted? We would find it difficult to choose 11 elective units that are relevant to a "fermented food slant"</p>	Suggestion adopted - specialisation returned - now titled "Food and non-alcoholic beverages"

## Comments related to Elective Units – General Comments

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, Vic	Can see pathways from the Certificate III to this new qualification. Can also see it being relevant for people wanting to start a new business.	Great - that's good to know that the reworked version can work for you and your clients.
• RTO, Vic	Overall support for new draft of the qualification.	Great - thank you.
• Industry, Vic	Is there anything that could cover fermented egg products? Could something be added to the Knowledge Evidence of fermenting units that could cover pickling and fermenting of eggs?	Nothing specific about eggs at this stage, but the content in the micro/chemistry/Control fermentation/HACCP units will certainly be relevant and can be contextualised.

## General Qualification comments

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, Vic	Most of the issues that were in the first draft of the qualification look to be addressed in this new draft.	Great - thanks for the confirmation
• Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic	Thank you for the opportunity to provide feedback on this additional phase of this project.  As previously indicated I have concerns with the title and structure of the Certificate IV qualification. These concerns seem to have been reiterated by a Victorian RTO as recorded in your feedback table.  I believe it is misleading for someone to graduate with a Certificate IV in Artisan Fermented Food and Beverages when they may have few skills/ little knowledge in one of the aspects listed in the title i.e. a graduate who has not specialised in	The core units of competency in this qualification are applicable to both food and beverage production and are not mutually exclusive. Even if a learner chooses a "brewing" specialisation, they will have gained skills and knowledge that can be applied in a fermented food environment as well as a beverages environment.  Further, the development of two separate qualifications is not suitable due to the duplication of content between the two qualifications which is not permitted in the <i>Standards for Training Packages 2012</i> .



Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	brewing or distilling nor studied these aspects will still hold a qualification in 'fermented beverages'. Perhaps a change of title to Certificate IV in Artisan Fermented Products would be better or the development of an 'artisan fermented food' qualification and an 'artisan beverage' qualification.	However, to help clarify the broad coverage of the qualification, the suggestion to change the title of the qualification has been adopted, and specialisation for "Food and non-alcoholic beverages" returned.

## Summary of feedback on draft of *FBP5XX19 Diploma of Artisan Cheese Making*

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, SA	Develop a HACCP-based FSP should be core as a core unit is supervise and maintain a FSP, so these should be taught together	Suggestion adopted - <i>Develop a HACCP-based food safety plan added to core and Supervise and maintain a food safety plan moved to elective bank.</i>
• RTO, SA	this should read up to 5 units from the elective list? as per above	Yes - numbers in packaging rules updated.
• RTO, SA	Develop a HACCP-based food safety plan should be a core unit instead of "Supervise and maintain a food safety plan". Develop HACCP plan is actually better for Artisanal, especially if people are going in to this space for the first time- writing a plan is better (and more likely) than following an existing one	Suggestion adopted - <i>Develop a HACCP-based food safety plan added to core and Supervise and maintain a food safety plan moved to elective bank.</i>
• RTO, SA	<i>RE: Core units</i> FBPCHE5XX3 Produce acid and heat coagulated artisan cheese, FBPTec4003 Control food contamination and spoilage, MSL973013 Perform basic tests could all be elective units	Suggestion adopted - <i>FBPCHE5XX3 Produce acid and heat coagulated artisan cheese and MSL973013 Perform basic tests moved to elective bank, FBPTec4003 Control food contamination and spoilage remains in core (see feedback below).</i>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, WA</li> </ul>	<p>Two things that keep coming up that people don't understand is hygiene and recordkeeping How to match theory of hygiene with physical cleaning skills</p>	<p>Yes - <i>Control food contamination and spoilage</i> left in core for that reason, also <i>Develop a HACCP-based food safety plan</i> added to core.</p>
<ul style="list-style-type: none"> <li>Government Department, WA</li> </ul>	<p>The main query in Western Australia is the size of the market for these qualifications and the likely demand for training in a very niche area. The workshop that took place in Perth focussed on Brewing, as the participants were from that industry, and they raise specific issues related to brewing that will need to be considered.</p>	<p>Yes - there hasn't been a lot of interesting the cheese making qual in WA, but interest has come from NSW, SA, TAS and VIC.</p>
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p>No environmental unit in core – is in elective. Cheese has big environmental impact. Biggest issue with cheese is removal of whey and waste products</p>	<p><i>MSMENV472</i> is an elective, and disposal of waste is emphasized in cheese- making units... otherwise the core becomes too large and the overall qualification becomes less flexible.</p>
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<p><i>RE: Entry Requirements</i> Good knowledge of chemistry and biology (especially microbiology) as they apply to food is highly recommended.</p>	<p>Yes - we will add this information to a Companion Volume. RTOs should always go through a process to determine who is a suitable and appropriate candidate to be enrolled in a qualification. Adding a formal entry requirement can be problematic in that there will be exceptions that will be forced into doing (and paying for) extra training, so it can create a barrier.</p>
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<p><i>RE: Packaging Rules</i> Error in Packaging Rules (number of elective units)</p>	<p>Yes - packaging rules revised.</p>
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<p><i>RE: Packaging Rules</i> Prefer 6 elective units</p>	<p>Suggestion adopted - numbers in packaging rules revised to include more elective units, allowing for more flexibility.</p>
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<p><i>RE: Titles of units in qualification</i> <i>Multiple suggestions made to unit titles to make cheese specific</i></p>	<p>We have scope to change some titles (in the new units with XXs in the code) and not others (in the current units that have no Xs). We have no scope to change titles of units from other training packages - units that do not begin with FBP. Some of the new FBP units cross over with other aspects of this project (fermenting food, brewing and</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
		distilling) so changing the title to be specific to milk and cheese isn't possible. Please bear in mind that the content of all units should be contextualised for the learner/qualification it's being delivered within.
• Industry, Vic	<i>RE: Core units -</i> [Suggest adding] Explain and solve actual and potential problems during cheese make process	Suggestion adopted – this content has been added to the cheese-making units (rather than separating it as a separate unit).
• Industry, Vic	<i>RE: Core units</i> We suggest adding a unit: demonstrate good understanding of: <ul style="list-style-type: none"> <li>• cheese history, especially in western Europe, the UK, US and Australia and New Zealand</li> <li>• the different cheese families and their key physico-chemical similarities and differences</li> </ul>	Suggestion adopted, but because this is really 'knowledge content', this content will again be added to the cheese-making units. In VET, we try and focus units of competency on 'job tasks' that have a practical focus supported by knowledge.
• Industry, Vic	<i>RE: Elective unit FBPFST5002 Identify and implement required process control for a food processing operation</i> This one should be a core subject	Suggestion adopted - unit moved to core.
• Industry, Vic	<i>RE: Elective unit FBPFSTY5001 Develop a HACCP-based food safety plan</i> This should already be covered in core subject FBPFSTY4001 above, and should be core, not an elective	Suggestion adopted - <i>Develop a HACCP-based food safety plan</i> added to core and <i>Supervise and maintain a food safety plan</i> moved to elective bank.
• Industry, Vic	<i>RE: Elective unit</i> We suggest adding an elective unit for raw milk cheesemaking: Develop, supervise and maintain a food safety plan, and identify and implement required process control, for a raw milk cheesemaking operation in accordance with the raw milk cheese requirements of the Food Standards Code ANZ	This content could definitely be covered by contextualising <i>FBPFSTY5001 Develop a HACCP-based food safety plan</i> and <i>FBPFST5002 Identify and implement required process control for a food processing operation</i> . We will add this information to the Companion Volume.



## Summary of feedback on draft Skill Sets

### FBPSSXXXX1 Cheesemonger Skill Set

*No specific feedback requiring action*

### FBPSSXXXX2 Artisan Cheese Maker Skill Set

*No specific feedback requiring action*

### FBPSSXXXX3 Artisan Brewer Skill Set

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p>Sensory analysis is just one of the means of assessing foods and beverages. An all-encompassing Quality Control unit would cover more ground, including laboratory analyses etc.</p>	<p>Agreed - The skill set has been updated to target those who have knowledge and skills in food safety/food quality (such as ex-chefs) to address this concern. A skill set would not typically cover all the skills and knowledge covered in the qualification.</p>
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p>There needs to be an entire skill set around fermentation and maturation. It can't just be tucked into cellar operations.</p>	<p>Agreed - there are new units that focus on 'Control and monitor fermentation', and another on microbiology and chemistry of fermentation, both of which are electives in the Certificate IV. The dilemma with a skill set is how many units to add in, and if there are too many, distinguishing the difference between the skill set and the qualification.</p>
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<p><i>RE: Inclusion of Manage bottling and packaging processes unit</i> Should be 'packaging' focussed rather than exclusive to bottling to pick up keg filling, can filling, cask racking, bulk transport etc.</p>	<p>Suggestions adopted - new unit developed '<i>Manage filling and packaging processes</i>' to cover the requirements of brewers and included in skill set to replace previous bottling unit.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• Industry, QLD</li> </ul>	<p><i>RE: above comment</i></p> <p>Agree with [above comment] that bottling should not be the primary focal point. Artisans are dealing with a range of packaging formats, as well as techniques. Filtration would need to be addressed here too.</p>	
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p>An understanding of HSE legislation, employee and employer obligations relating to safety, and the implementation and maintenance of Safety Management systems are vital skills for brewers. An understanding of risks, and approaches to mitigating them are absolutely essential in industrial brewing contexts. This may be folded into each component skills set (i.e. HSE for packaging operations etc), but it may serve students better to have a higher level, overarching unit dedicated to safety management.</p> <p>QA/QC or analytical quality competencies are critically important to the craft beer industry, and should be listed</p> <p>Regulatory compliance for craft and artisan producers is also key, and currently a gap in industry understanding (especially compliance with FZANZ, EPA and ATO requirements).</p> <p>Finally, environmental sustainability in artisan beverage production is a key focus for industry, and often overlooked in current training curricula</p>	<p>Suggestion adopted - more emphasis has been placed on HSE legislation/environmental regulations/Food Standards Code in the practical brewing units, and if candidates complete the Cert IV qualification they would need to complete the WHS unit and the Food Safety unit to cover these issues more thoroughly. Again, the issue here is with how many units are included in the skill set for it to remain a skill set. The information about the target audience for the skill set has been updated to target those who have some WHS skills and knowledge</p>

## FBPSSXXX4 Artisan Food and Beverage Fermenter Skill Set

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p>Sensory is not enough. This needs to be broadened to a 'Quality Control'/ 'Quality Analysis' subject. Comparisons could be made with the pharmaceutical industry.</p>	<p>The skill set has been updated to target those who have knowledge and skills in food safety/food quality (such as ex-chefs) to address this concern.</p> <p>Skill sets will never cover the whole range of skills and knowledge covered in a qualification, loading them up with too many units can reduce their appeal/usefulness.</p>

## FBPSSXXX5 Artisan Olive Producer Skill Set

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p>Maybe include packaging unit – pros and cons to eg bottles, vacuum, pasteurizing</p>	<p>Suggestion adopted - <i>FBPTEC4008 Apply principles of food packaging</i> (which is a current unit) has been added</p>
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p><i>RE: Inclusion of Manage harvest of crops unit</i> This unit is probably more detailed than most small olive growers will be interested in, in Tasmania at least. Still valuable, but quite different skills and knowledge from the other units. Might be better keeping this separate...</p>	<p>Suggestion adopted - unit removed. This unit could be included as a suggestion in the Companion Volume Implementation Guide.</p>
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p>put in a unit around food safety/food quality</p>	<p>Suggestion adopted - <i>Develop a HACCP-based food safety plan</i> added to skill set</p>

## FBPSSXXX6 Artisan Distiller Skill Set

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"><li>Industry + RTO, Vic</li></ul>	There is no content on wort production, (simple) yeast biochemistry, or (simple) yeast microbiology Nothing about filtration?	Suggestion adopted - <i>FBPTEC4XX12 Manage wort production for distilling</i> has been added.  The issue with adding more units is about the size of the skill set (vs enrolling in a qualification that covers the broad range of skills and knowledge). Some of this content is covered in the units included in the skill set already, the qualification will cover all of these skills and
<ul style="list-style-type: none"><li>Industry, NSW</li></ul>	Looks good	Thanks for the feedback!

## FBPSSXXX7 Establish an Artisan Food or Beverage Business Skill Set

*No specific feedback requiring action*

## FBPSSXXX8 Present Artisan Food and Beverages Skill Set

*No specific feedback requiring action*

## FBPSSXXX9 Produce Artisan Fermented Food Skill Set

*No specific feedback requiring action. However, this skill set removed because of the overlap with FBPSSXXX4 Artisan Food and Beverage Fermenter Skill Set.*



## Summary of feedback on draft Units of Competency

### BPG Bottling and Packaging sector - New units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPBPG4XX1 Manage bottling and packaging processes</b>		
• Industry, QLD	This appears to assume a scale far beyond the scope of many artisanal producers, who are using far more primitive techniques than fully-automated production facilities. There needs to be education around how they can achieve a quality result with these rudimentary techniques, rather than assuming they all operate plants with conveyor belts and isobarometric filling systems (not that they're not relevant).	Suggestion adopted - application of unit revised to include 'manual and small scale, semi-automated systems' which is what most producers that we've visited during the project seem to use. The unit could be delivered in conjunction with the labelling and the requirements of alcoholic beverage unit to flesh out some of the requirements around alcoholic content, fill levels, etc.
• Industry & RTO, NSW	add cans and kegs	Suggestion adopted - new unit developed for beer titled ' <i>Manage filling and packaging of fermented beverages</i> ' - it includes cans and kegs, carbonating and pasteurising.
• Industry & RTO, NSW	Pasteurisation should be added to packaging as well – not relevant for spirits though. Packaging for beer needs to include pasteurisation.	Suggestion adopted - new unit developed for beer titled ' <i>Manage filling and packaging of fermented beverages</i> ' - it includes cans and kegs, carbonating and pasteurising.
• Industry & RTO, NSW	Control dissolve oxygen, carbonation need to be included	Suggestion adopted - new unit developed for beer titled ' <i>Manage filling and packaging of fermented beverages</i> ' - it includes controlling dissolved oxygen as well.
• multiple stakeholders, WA	Pasteurisation needs to be included somewhere in the bottling/packaging area. Some supermarkets won't allow you to sell beer to them if it has not been pasteurised.	Suggestion adopted - new unit developed for beer titled ' <i>Manage filling and packaging of fermented beverages</i> ' - it includes cans and kegs, carbonating and pasteurising.
• multiple stakeholders, WA	Bottle conditioning is important	Suggestion adopted - added to new unit titled ' <i>Manage filling and packaging of fermented beverages</i> ' which covers this.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>multiple stakeholders, WA</li> </ul>	Wine-related packaging units cannot be used for beer packaging because beer (and kombucha) is carbonated and is a different process. Process is different again for soft drinks.	Suggestion adopted - new unit developed for beer titled ' <i>Manage filling and packaging of fermented beverages</i> ' - it includes cans and kegs, carbonating and pasteurising.
<ul style="list-style-type: none"> <li>multiple stakeholders, SA</li> </ul>	Packaging unit needs to cover bottling and canning.	Suggestion adopted - new unit developed for beer titled ' <i>Manage filling and packaging of fermented beverages</i> ' - it includes cans and kegs, carbonating and pasteurising.
<b>FBPBPG4XX2 Manage filling and packaging of fermented beverages</b>		
<ul style="list-style-type: none"> <li>RTO, NSW</li> </ul>	<i>RE: Element 2</i> will every beverage be carbonated?	Not every beverage will be carbonated or pasteurised, but it seems reasonable that learners know how to carry out these tasks as part of training.
<ul style="list-style-type: none"> <li>RTO, NSW</li> </ul>	<i>RE: PCs 3.3, 3.4, 3.5</i> Assuming the beverage is being pasteurized?	
<ul style="list-style-type: none"> <li>RTO, NSW</li> </ul>	<i>RE: Element 4</i> Do you need to say anything about handovers?  Also anything about troubleshooting? (Sorry I think I saw it somewhere)	In an artisan setting, there may not be a handover.  PCs 2.4, 3.10 refer to rectifying faults, and problem solving is also included in the foundation skills field

## CEL Cellar Operations - Revised units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPCEL2009 Carry out transfer operations</b>		
• Industry, QLD	<i>RE: Knowledge Evidence - cleaning</i> This must be understood as a precondition before commencing work as well as being carried out at the end.	Suggestion adopted - 'cleaning' added to the Knowledge evidence of unit.
• Industry, QLD	<i>RE: Knowledge Evidence</i> This pertains not only to wine-making. OH&S issues around brewing pertain to CO2 levels, isobarometric transfer, centrifuge operation, vessel CIP etc.	This is a cross sector unit and the content needs to remain generic, but new units have been developed to cover this information (titled ' <i>Filter fermented beverages</i> ', and ' <i>Manage filling and packaging of fermented beverages</i> ').
• Industry, QLD	Methods of filtration need to be considered.	Suggestion adopted - new unit developed for brewing titled ' <i>Filter fermented beverages</i> '.
• Industry, WA	BREWING SPECIFIC? (as below) chemicals used/equipment used/valve types/vessel types (hose+ tank)	Suggestion adopted - new unit developed for brewing titled ' <i>Filter fermented beverages</i> ' that includes this information.
• Industry, WA	<i>Referring to above comment</i> THIS	New unit developed for brewing titled ' <i>Filter fermented beverages</i> ' that includes this information.
<b>FBPCEL3005 Operate the pressing process</b>		
• Industry, QLD	...is this still for brewing?	It's not a good fit, so it has been removed from elective bank. <b>**REMOVED from project - not suitable for artisan fermented beverages.</b>
<b>FBPCEL3006 Operate the fine filtration process</b>		
<b>**REMOVED from project - not suitable for artisan fermented beverages.</b>		

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<b>FBPCEL3007 Operate clarification by separation (centrifugation) process</b>	
<i>**REMOVED from project - not suitable for artisan fermented beverages.</i>	
<b>FBPCEL3008 Operate the rotary vacuum filtration process</b>	
<i>**REMOVED from project - not suitable for artisan fermented beverages.</i>	
<b>FBPCEL3009 Operate the crossflow filtration process</b>	
<i>**REMOVED from project - not suitable for artisan fermented beverages.</i>	
<b>FBPCEL3011 Operate the reverse osmosis process</b>	
<i>**REMOVED from project - not suitable for artisan fermented beverages.</i>	

## CHE Cheese - New units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<b>FBPCHE4XX1 Prepare and present cheese</b>	
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	Love this unit, minor considerations - change 'blanc' to 'fresh cheese' in Performance Evidence and Knowledge Evidence.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	<i>RE: Knowledge Evidence</i> Very scientific and unsure why phosphorus is mentioned, yes it is in cheese but this is present cheese not a degree in food science. Maybe nutritional information in cheese
	Suggestion adopted. Thanks for the positive feedback!
	Suggestion adopted - detailed lists removed

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, Vic	<i>RE: Application</i> Suggest adding 'wrapping'	Suggestion adopted
• Industry, Vic	<i>RE: PC 3.4</i> Add 'provenance' Add '... and with recommendations for its post-purchase storage by the customer'	Suggestions adopted
• Industry, Vic	<i>RE: PC 4.1</i> Minor edit suggested to PC	Suggestion adopted
• Industry, Vic	<i>RE: Elements and Performance Criteria</i> We suggest adding another element: 5. Wrap cheese, for which the performance criteria would be: Identify appropriate wrap material for different cheeses. Wrap different shaped cheeses and cut pieces neatly and with appropriate folding.	Suggestion adopted
<b>FBPCHE5XX1 Produce lactic acid coagulated artisan cheese</b>		
• RTO & Industry, SA	Useful unit – made suggestions for changing some of the technical language around processing.	Suggestions have been implemented.
• RTO & Industry, SA	<i>RE: PC 1.2</i> Prepare starter under aseptic condition or using good hygiene practices	Suggestion adopted - PC updated.
• RTO & Industry, SA	<i>RE: PC 1.4</i> Not sure what is meant by quarantine, maybe GMP and GHP	Suggestion adopted - PC updated to include GMP.
• RTO & Industry, SA	<i>RE: PC 3.1</i> Starter cultuer, try and keep language the same	Suggestion adopted - PC updated.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO & Industry, SA	<i>RE: PC 4.2</i> Plan production to meet specific outcomes	In this element the PC is more about the number of times the curd is cut and at what intervals.
• RTO & Industry, SA	<i>RE: PC 5.1</i> Hard as an observation	Suggestion adopted - PC updated ('Control' changed to 'monitor', which would be 'regulated' through time).
• RTO & Industry, SA	<i>RE: PC5.3</i> Not sure how to observe ripening agents	Suggestion addressed - 'ripening agents' removed from PC.
• RTO & Industry, SA	<i>RE: PC 6.1</i> Observation?	Suggestion addressed - PC updated to read 'observe effects'.
• RTO & Industry, SA	<i>RE: PC 6.2</i> Unsure of meaning and again observation	This is about understanding the effect of adjuncts on the ripening process and adjusting the recipe for a desired effect.
• RTO & Industry, SA	<i>RE: Knowledge Evidence</i> Impact of unwanted micro organisms in cheese	Suggestion adopted - dot point updated.
• Industry, Vic	<i>RE: Element 1</i> Suggest adding 'ripening'.  Split PC 1.1 and make additions: <ul style="list-style-type: none"> <li>• Identify characteristics, make parameters and production goals of type of lactic acid coagulated cheese to be made.</li> <li>• Identify hazards and manage risks associated with producing cheese of that type</li> <li>• Assess milk composition (fat, proteins, minerals, pH, titratable acidity etc) of milk in vat, and adjust make parameters accordingly</li> </ul>	Suggestions adopted (3rd dot point added to Element 2).

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, Vic	<i>RE: Elements and Performance Criteria</i> Suggest adding reference to 'Production goals' in multiple locations. Other minor edits throughout	Suggestions adopted.
• Industry, Vic	<i>RE: Foundation Skills</i> Suggest additions to <i>Reading</i> and <i>Writing</i> sections. Added titratable acidity to <i>Numeracy</i> section	Suggestions adopted.
• Industry, Vic	<i>RE: Knowledge Evidence</i> Multiple additions and edits suggested in Knowledge Evidence section	Suggestions adopted.
• Industry, Vic	<i>RE: Assessment Conditions</i> Add 'cheese ripening resources' to <i>resources</i> section	Suggestion adopted.
<b>FBPCHE5XX2 Produce rennet coagulated artisan cheese</b>		
• RTO & Industry, SA	Useful unit – made suggestions for updating the Performance evidence to include one washed curd cheese and one milled curd cheese	Suggestions have been implemented.
• RTO & Industry, SA	<i>RE: PC 1.2</i> Prepare starter under aseptic conditions or using GHP	Suggestion adopted.
• RTO & Industry, SA	<i>RE: PC 1.4</i> Follow GHP and GMP	Suggestion adopted.
• RTO & Industry, SA	<i>RE: PC 5.4</i> Ripening agents important when ripeneing, not in production, question poses two options, again difficult to observe	Suggestion adopted - 'ripening agent' removed.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• RTO &amp; Industry, SA</li> </ul>	<p><i>RE: Knowledge Evidence</i>            Starter cultures            Also this UOC is rennet set so maybe leave out bacterial cultures</p>	Suggestion adopted - 'bacterial cultures' removed.
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p><i>RE: Element 1</i>            Suggest adding 'ripening'.</p> <p>Split PC 1.1 and make additions:</p> <ul style="list-style-type: none"> <li>• Identify characteristics, make parameters and production goals of type of rennet coagulated cheese to be made.</li> <li>• Identify hazards and manage risks associated with producing cheese of that type</li> <li>• Prepare make and ripening sheet for the cheese to be made, showing reference parameters for that cheese type, and record all actual make and ripening parameters on the sheet as they occur</li> <li>• Assess milk composition (fat, proteins, minerals, pH, titratable acidity etc) of milk in vat, and adjust make parameters accordingly</li> </ul>	Suggestions adopted.
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p><i>RE: Element 2</i>            Edits to PC 2.2 and 2.3 to refer to adjusting processes based on milk composition</p>	Suggestions adopted.
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p><i>RE: Element 4</i>            Suggest adding following PCs (in addition to other minor edits)</p> <ul style="list-style-type: none"> <li>• Calculate total time, flocculation and hardening times for optimum acidification curve, coagulation and final moisture content, according to desired cheese type and parameters</li> <li>• Prepare moulds into which curds will be hooped</li> <li>• Prepare curd for hooping into chosen moulds</li> </ul>	Suggestions adopted.
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p><i>RE: Element 6</i>            Suggest changing Element to <i>Mould, turn, salt, press and age cheese</i>            Suggest adding following PCs (in addition to other minor edits)</p> <ul style="list-style-type: none"> <li>• Hoop curd into prepared moulds at appropriate time</li> <li>• Turn cheeses in moulds at appropriate intervals to maximise optimal</li> </ul>	Suggestions adopted



Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	drainage and acidification <ul style="list-style-type: none"> <li>• Maintain brine bath, if used, for optimal salting and food safety outcomes, according to type of cheese being brined</li> <li>• Monitor, adjust and record ripening parameters for the cheese according to type, including turning, washing, brushing, ambient air temperature, humidity, air movement, air renewal</li> </ul>	
• Industry, Vic	<i>RE: Foundation Skills</i> Suggest additions to Reading and Writing sections. Added titratable acidity to Numeracy section	Suggestions adopted.
• Industry, Vic	<i>RE: Knowledge Evidence</i> Multiple additions and edits suggested in Knowledge Evidence section	Suggestions adopted.
<b>FBPCHE5XX3 Produce acid and heat coagulated artisan cheese</b>		
• RTO & Industry, SA	Useful unit – made suggestions for minor tweaks to the technical processing details	Suggestions have been implemented.
• RTO & Industry, SA	<i>RE: PC 1.3</i> Demonstrate GHP and GMP	Suggestions adopted.
• RTO & Industry, SA	<i>RE: Knowledge Evidence</i> Aseptic really means sterile, maybe follow GHP and GMP in work place as stipulated in FSP	Suggestions adopted.
• Industry, Vic	Note that the addition of acidulants (eg citric acid) to milk products, particularly cheese (to replace the acidification process that otherwise occurs with lactic acid bacteria converting the milk's lactose to lactic acid) is controversial. A purist would say that such a product is neither a fermented food nor an artisan product. It is commonly used in industrial dairy processing (as it is much easier and quicker than waiting for those pesky bacteria to do their work!). If it is used to replace all or most of the bacterial fermentation process, then the	Agreed - this unit has been moved to the elective bank, so it will be optional for candidates who enrol. Other changes adopted as suggested.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	<p>resulting product will arguably will not confer the same nutritional and health benefits. It is, however, employed by some producers of pasta filata cheese products like mozzarella, which they would no doubt call artisan production. Acid-added dairy production is not something that ASCA would see as requiring a separate unit in an artisan cheesemaking course (although it would be noted along the way and explained as a technique used by industrial manufacturers). On the other hand, heat-treated pasta filata cheesemaking probably does deserve its own unit - it's just that it should be taught as a heat-treated fermented product, with some coverage of the acid-added techniques. We suggest this unit should otherwise have the same changes made to it as the 'Produce rennet coagulated cheese' unit.</p>	
<b>FBPCHE5XX4 Ripen artisan cheese</b>		
• RTO & Industry, SA	Useful unit. Love this one, no suggestions	Thank you for the positive feedback. No action required.
• Industry, Vic	Minor suggestion to <i>Application</i> section	Suggestion adopted.
• Industry, Vic	<p><i>RE: Element 1</i> Suggest adding to PCs Identify make parameters and processes followed by cheese maker for the cheese, and prepare ripening sheet for the cheese, showing reference parameters for that cheese type, and record all actual ripening parameters and processes on the sheet as they occur</p>	Suggestion adopted.
• Industry, Vic	<p><i>RE: Element 2</i> Suggesting adding 'racks to be used' to PC 2.1 Suggest adding to PCs Identify and communicate optimal ripening stage and ongoing care requirements for the cheese, including with cheese buyers and sellers</p>	Suggestion adopted.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<i>RE: Foundation Skills</i> Add 'organoleptic parameters' to Writing section	Suggestion adopted.

## CHE Cheese - Revised units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPCHE5001 Carry out sampling and interpret tests for cheese production</b>		
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	Useful unit. Suggested removing 2 PCs, adding a new PC and tweaking the KE.	Suggestions have been implemented.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	<i>RE: PC 2.2</i> Salt level very hard for artisan cheese makers to monitor, would have to be sent off for testing, if it says including does that mean you must observe, and this would be post production	Suggestion adopted - 'salt levels' removed from PC2.2 (and remains in 2.3).
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	<i>RE: PC 2.3</i> Again fat and salt hard for small producers, plus it is observation	Suggestion adopted - PC changed to include 'and observe fat and salt levels'.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	<i>RE: PC 3.2</i> This is a method for the big producers when they used to make their own cultures. Now cultures are purchased at DSV, activity is not measured	Suggestion adopted - PC removed.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	<i>RE: PC 3.3</i> This could be end of product testing but small producers	Suggestion adopted - PC is now 3.2 - ', total coliforms and staphylococci' removed.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	would not do their own micro plus would be discouraged by authorities unless there is a designated laboratory.	
• RTO & Industry, SA	<i>RE: PC 3.5</i> No small producer I believe can do this, I would have to research it	Suggestion adopted - PC removed.
• RTO & Industry, SA	<i>RE: Knowledge Evidence</i> Observation or question	Suggestion addressed - dot point removed (it was vague).
• RTO & Industry, SA	<i>RE: Knowledge Evidence</i> Do not understand this	Dot point updated to read: • chemical and physical methods available for controlling microbial growth.
• RTO & Industry, SA	<i>RE: Knowledge Evidence</i> Not done in small production, will have to investigate method	Suggestion addressed - dot point removed.
• Industry, Vic	<i>RE: Application</i> Suggest adding 'Good knowledge of chemistry and biology (especially microbiology) as they apply to food is highly recommended.'	Suggestion addressed - this information will be added to a Companion Volume Implementation Guide.
• Industry, Vic	<i>RE: Elements 2 and 4</i> Multiple suggestions in Performance Criteria	Suggestions adopted.
• Industry, Vic	<i>RE: Performance Evidence</i> Suggest adding reference to microbes	Suggestions adopted.
• Industry, Vic	<i>RE: Knowledge Evidence</i> Multiple suggested additions	Suggestions adopted.



## FST Food Science and Technology - New units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPFST4XX1 Interpret and respond to test results</b>		
• Industry, QLD	<i>RE: Performance &amp; Knowledge Evidence</i> ...conductivity, AE, total acid (for sours), PCR, micro plating etc. These parameters are going to vary from product to product. If beer is the focus, then so be it, but it won't serve other artisanal producers.	Yes - the issue here is with keeping the unit applicable to several sectors. The list in the Performance Evidence has been updated to include some beer specific tests as options (and see comment below).
• Industry & RTO, NSW	<i>RE: Performance Evidence</i> VDK organoleptic, VDK spectrometer CO <sub>2</sub> , N <sub>2</sub> DO TPO FAN spectro	Suggestion adopted - most test types added to the list of options in Performance Evidence (but not the instrument type, because listing them will restrict content to brewing sector, and trying to keep unit cross-sector).
• Industry & RTO, NSW	"Detecting and Identifying spoilage micro organisms in a production process" should be a separate elective UOC	Agreed - separate unit on microbiology/chemistry developed, which covers deeper knowledge/skills around contamination and spoilage - the focus in this unit is on atypical results that could be changed by adjusting the processing.
<b>FBPFST4XX2 Apply sensory analysis in fermented food and beverage production (now FBPFST4XX2 Apply sensory analysis in fermented food and/or beverage production)</b>		
• RTO & Industry, SA	Useful unit – a couple of suggestions to add to the KE	Suggestions have been implemented (and thank you for the positive feedback).
• Industry, QLD	<i>RE: Element 1</i> There will be preexisting frameworks for the organoleptic evaluation of each consumable and these are what need to be taught, otherwise it won't be industry relevant (eg: one brewing evaluation framework is the BJCP).	Suggestion adopted - • frameworks for organoleptic evaluation, relevant to product' added to Knowledge Evidence.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, NSW	<i>RE: typo in Knowledge Evidence</i> umami?	Suggestion adopted.
• RTO, NSW	<i>RE: typo in Performance Evidence</i> remove extra "in"	Suggestion adopted.
• Industry, QLD	<i>RE: Knowledge Evidence</i> Fault detection as discussed, 19/2/19- assessing, flavour to fault correspondence.	Suggestion adopted - extra PCs added to cover faults and personal blind spots
• Industry, QLD	<i>RE: Performance Evidence</i> Fault detection, as discussed 19/2/19, practical assessment- non graded. helping individuals identify personal gaps. BREWING SPECIFIC	Suggestion adopted - faults and blind spots added to Performance Evidence.
• Industry, Tas	<i>RE: PC 1.1</i> textural	Suggestion adopted - spelling corrected.
• multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	Performance Evidence needs to be clarified better about what's being assessed, especially for those who only want to focus on beverages.	Suggestion adopted - Performance Evidence updated.
• Industry & RTO, NSW	Add fault identification to this unit	Suggestion adopted.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	<p>Educating people on the panel side of things as well as individual sensory will help people learn what their blind spots are. Could add to knowledge evidence, content around spiking. Students have to understand limitations are involved and what is not covered by undertaking sensory analysis. Add to Knowledge Evidence?</p>	<p>Suggestions adopted - added to Knowledge Evidence.</p>
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p>Important to make it clear that sensory analysis is about identifying and recognising whether what is being tested has the right marks - cloudy, colouring etc. and not just about whether something is a "good product or not". This could be added to the Knowledge Evidence - how to identify a quality product that is specific to the work role.</p>	<p>Suggestion adopted - added to Knowledge Evidence.</p>
<ul style="list-style-type: none"> <li>Industry, WA</li> </ul>	<p>One person will do this in an artisan environment. BUT one person tasting a product is not the process to get a beer on the market. So panels could be added. People need to be aware of own skills and blind spots. HAVE to taste it and it has to be good.</p>	<p>Suggestion adopted - information about panels added to Knowledge Evidence.</p>
<ul style="list-style-type: none"> <li>Industry, Qld</li> </ul>	<p>Fault detection is important to be in the unit.</p>	<p>Suggestion adopted - fault detection added to PCs and Performance Evidence.</p>
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), WA  (attendees included Industry, WA Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum</li> </ul>	<p>People are sensitive to certain flavour compounds and interpret tastes different. This may be useful to add to Knowledge Evidence. This is also why it is important to have a cross-section of different people in a sensory panel if used.</p>	<p>Suggestion adopted - added to PCs and Knowledge Evidence.</p>



Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Maintenance Managers (CMM), Government Department)		
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), WA  (attendees included Industry, WA Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM), Government Department)</li> </ul>	<p>People need to be aware of blind spots in sensory analysis. Can't mark someone down if they can't identify a specific flavour e.g. bitter. May have a different response to flavour than others. Can't mark down because of that. BUT a person needs to know that they can't identify these flavours. (Sensory blind spots) Blind spots are not a problem if a person is aware they have them.</p>	<p>Suggestion adopted - added to PCs and Performance Evidence (and panels in Knowledge Evidence).</p>
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), WA  (attendees included Industry, WA Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM), Government Department)</li> </ul>	<p>Some flavour defects in styles of beer can be an advantage. Make sure the "types" of flavours (eg sour) may actually be intended. So style/context/specification/faults need to be factored in to the unit. Tasting/testing based on how it's supposed to be (which could be extra sweet or extra bitter)</p>	<p>Suggestion adopted - added to Knowledge Evidence.</p>
<ul style="list-style-type: none"> <li>Industry, WA</li> </ul>	<p>Performance Evidence looks ok. May be able to add in reference to blind spots/sensitivities. Repetition is important.</p>	<p>Suggestion adopted.</p>
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), SA  (attendees included RTO, Industry, National</li> </ul>	<p>Missing defects and faults. Contamination etc.</p>	<p>Suggestion adopted.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Government Department, SA Industry Association)		
<b>FBPFST5XX1 Identify the microbiological and chemical properties of fermented foods (now <i>FBPFST5XX1 Identify the microbiological and chemical properties of fermented food and beverages</i>)</b>		
• RTO, Vic	Suggest removing testing, as not all micro-brewers will be able to do the tests themselves. This is important to know but the actual testing part might be difficult or unsuitable.	Agree with the suggestion that this unit is not suitable for brewers, so it has been removed from core and placed in the "Food and non-alcoholic beverages" specialisation.
• RTO, Vic	Poisoning bacterial not relevant to brewing – suggest rewording.	Suggestion adopted - unit moved out of core
• RTO, Vic	This is a really important unit to have, very valuable. Some minor changes should make it usable by many and suitable for inclusion in core.	Feedback from subject matter experts suggested this unit wouldn't be suitable for all specialisations covered by the Certificate IV qualification. Suggested changes (proposed by stakeholder below) may make it more suitable for the brewing, but would make it less suitable for the other specialisations. This makes the unit unsuitable for inclusion in the core. With additional feedback from other subject matter experts, minor changes have been made throughout the unit so that it is still suitable for most specialisations (and ideally more closely suited to brewing as well where possible), and has been moved out of the core and in to the elective group of the qualification to be selected by relevant sectors.
• Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), WA	<i>RE: Application</i> I like the idea of this paragraph but 'deep knowledge' seems over the top. For the most part people at this level will be following tried and true practices, with maybe a little experimentation. They are not higher ed researchers.	Suggestion adopted - 'deep' removed and sentence reworked.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• RTO, Vic</li> </ul>	<p>We don't believe a microbrewer requires a level 5 micro/chem unit. Knowledge and skill should be at a working, achievable level. Agree with 41 that a brewers best defense against micro and chemical contamination is through having strong quality procedures and controls.</p>	<p>Suggestion adopted - unit moved out of core.</p>
<ul style="list-style-type: none"> <li>• Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), WA</li> </ul>	<p><i>RE: Title and Application</i>  The title and description seem wrong. Shouldn't this Unit be about determining, undertaking and quality controlling fermentation processes?  Fermentation doesn't just happen it is a key work function.</p> <p>I'm also not sure about the frequent use of the work 'identify'. A Unit should describe a work function and elements describe a work task. Identify doesn't seem to meet this level.</p>	<p>The aim of this unit is to build some knowledge and skills around microbiology and biochemistry to underpin other units that focus on fermentation. It could be argued that this content should be included in the more practical units, but there would be a lot of content repeated. Companion Volume Implementation Guide will have some notes to recommend the delivery of this unit before other fermentation focussed units.</p>
<ul style="list-style-type: none"> <li>• RTO, Vic</li> </ul>	<p><i>RE: Application</i>  Microbiological analysis at a microbrewery level is going to be very basic with limited micro equipment and considering this is level 5, we don't believe the complexity of the unit meets the need of a micro brewery. Its OK for them to have working knowledge of this unit.</p>	<p>Suggestion adopted - unit moved out of core.</p>
<ul style="list-style-type: none"> <li>• RTO, SA</li> </ul>	<p>Add beverages to the title?</p>	<p>Suggestion adopted - 'beverages' added to title.</p>
<ul style="list-style-type: none"> <li>• RTO, SA</li> </ul>	<p>Is this for foods, non-alcoholic beverages, brewing and distilling or just food and non-alcoholic beverages? Core unit for the qualification? Definitely needs to be core for food and non-alcoholic beverage</p>	<p>Suggestion adopted - unit moved out of core and into 'Food and non-alcoholic beverages' specialisation.</p>
<ul style="list-style-type: none"> <li>• RTO, Vic</li> </ul>	<p><i>RE: PC 1.3</i>  Even at large brewery a yeast viability check is performed under a microscope is the only real analysis they do. Any contamination will be flagged in chemical changes such as pH or sensory. If the process is followed and quality is taken care off safety is guaranteed. We do not believe that microbreweries will be equipped to isolate and identify bacteria and yeast in samples. Very costly to set up.</p>	<p>Suggestion adopted - unit moved so not mandatory for brewing.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, Vic	<i>RE: Element 3</i> Unsure how this applies to brewing beer, any presence of spoilage bacteria will affect quality and prevent release. Not sure why we have to identify a pattern?? Not uncommon for no CCP's to exist in a brewery. So not if 3.3 is applicable. This whole section is a bit confusing for microbrewers who simply follow procedures to achieve a quality product	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>RE: PC 5.1</i> Don't believe a microbrewer will have the equipment to do this. Food poisoning bacteria is not applicable in brewing of beer.	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>RE: PC 5.2</i> Not applicable to brewing. Beer does not support pathogens	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>RE: reference to 'food poisoning' in Knowledge Evidence</i> Not applicable to brewing	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>RE: reference to 'typical spoilage patterns' in Knowledge Evidence</i> Again, not sure about this point?	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>Re: reference to 'relationship between spoilage patterns' in Knowledge Evidence</i> And this one?	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>RE: inclusion of 'rapid microbiological techniques' in Knowledge Evidence</i> Do they really need to know all of these?? Or any of these??? If bacteria present on any level, picked up by other methods. Likely not to do any micro testing so do they need this knowledge?	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>RE: Knowledge Evidence</i> Salmonella and listeria not applicable to brewing	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, Vic	<i>RE: reference to 'dew and condensation points' in Knowledge Evidence</i> Struggling to see relevance to fermentation of beer	Suggestion adopted - unit moved so not mandatory for brewing.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, Vic	<i>RE: reference to 'common chemical reactions' in Knowledge Evidence</i> These points make up a great deal of knowledge in the wort/fermentation units, are they in this unit because it is a core??? It makes sense to our students to cover chemical reactions in these units rather than this unit.	Suggestion adopted - unit moved so not mandatory for brewing.
• RTO, SA	Multiple edits suggested across all PCs	Suggestions adopted.
• RTO, SA	<i>Title - add 'and beverages'</i>	Suggestion adopted - title updated.

## FST Food Science and Technology - Revised units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPFST4009 Label foods according to legislative requirements</b>		
<i>No feedback received requiring action.</i> Title left as 'foods' rather than 'food and beverages', but content reflects both food and/or beverages. This will be a new release with minor changes (same unit code).		
<b>FBPFST5010 Implement and review the preparation of milk for processing</b>		
• RTO & Industry, SA	Could be useful as an elective. Minor tweaks to wording in PCs and KE.	Suggestions have been implemented.
• RTO & Industry, SA	<i>RE: Knowledge Evidence</i> This can be taught but it is not for artisan producers	Suggestion adopted - dot point removed.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	We suggest this unit should be done immediately after 4002 (Maintain work health etc), as milk quality and composition is the most critical aspect of artisan cheesemaking, and needs to be understood before cheesemaking begins.	Suggestion acknowledged - this information will be added to a Companion Volume Implementation Guide.

### FSY Food Safety - Revised unit of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPFSY4001 Supervise and maintain a food safety plan</b>		
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	Suggested changing CCP plan to 'food safety plan' throughout.	Suggestions have been implemented.

### OPR Operational - Revised unit of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPOPR3004 Set up a production or packaging line for operation</b>		
<p><i>No feedback received requiring action.</i></p> <p>No changes proposed for this unit of competency – will not be included in Case for Endorsement.</p>		

### PPL People, planning and logistics - New units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<b>FBPPPL4XX1 Prepare and present artisan food or beverages</b>	
<i>No feedback received requiring action.</i>	

### PPL People, planning and logistics - Revised units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<b>FBPPPL4002 Plan and coordinate production equipment maintenance</b>	
<ul style="list-style-type: none"> <li>• RTO &amp; Industry, SA</li> </ul>	Unit about equipment is needed – maintenance might pigeon-hole this a bit. Should be broader than this  Equipment addressed in sector specific units, and in 'Design an artisan food production facility'. No changes made to unit.
<b>FBPPPL4003 Schedule and manage production</b>	
<i>No feedback received requiring action.</i> No changes proposed for this unit of competency – will not be included in Case for Endorsement.	
<b>FBPPPL4007 Manage internal audits</b>	
<i>No feedback received requiring action.</i> No changes proposed for this unit of competency – will not be included in Case for Endorsement.	

## TEC Technical - New units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<b>FBPTEC3XX8 Prepare, fill and store barrels for aging spirits</b>		
• RTO & Industry, Vic	<i>RE: Element 4</i> Make mention of a barrel store being a hazardous and explosive environment and being in accordance with relevant Australian Standards	Suggestion adopted.
• RTO & Industry, Vic	<i>RE: PC 1.2</i> Barrels for maturing spirit are unlikely to require a spigot (a small tap out the front), but a bung to seal them	Suggestion adopted - reference to 'spigot' removed.
• RTO & Industry, Vic	<i>RE: PC 1.6</i> Storing water for this long in a warm climate could lead to mold growth and off bacterial flavours	Suggestion adopted - Element 1 rewritten.
• RTO & Industry, Vic	<i>RE: Knowledge Evidence</i> There isn't an ideal environment for storing maturing spirit in barrels, that's why many spirit from around the world are unique	Suggestion adopted - dot point removed.
• RTO & Industry, Vic	<i>RE: PC 1.5</i> This sounds like a single companies SOP, not general required practice	Suggestion adopted - Element 1 rewritten.
• RTO & Industry, Vic	<i>RE: Element 2</i> No mention of removal of preserving sulphur, or what needs to be cleaned from a barrel	Suggestion adopted - removal of preserving sulphur included in Element 1.
• RTO & Industry, Vic	<i>RE: PC 4.2</i> Maturing spirit barrels aren't normally turned	Suggestion adopted - PC removed.
• RTO & Industry, Vic	<i>RE: Foundation Skills</i> Label barrels in sequential order as filled. Record volume filled	Suggestion adopted.
• RTO & Industry, Vic	<i>RE: Element 3</i> Need to mention fill barrel with the volume recorded in accordance with ATO requirements, and label in sequential order as filled	Suggestion adopted.
• RTO & Industry, Vic	<i>RE: Element 2</i> This seems a very wasteful and inefficient method to be teaching people	Agreed - element removed.



<b>Stakeholder Comments and Identified Issues</b>		<b>Consideration and Proposed Resolution</b>
<ul style="list-style-type: none"> <li>Multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	<p>Don't assemble barrels - Cooper does this. You would check the barrel condition etc. but not more than that. At this level, need to know different types of woods, toasts, sizes, age – would need to know this information for blending.</p>	Suggestion adopted - Element 1 rewritten.
<ul style="list-style-type: none"> <li>Multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	<p>Storage, maintaining oak etc IS valuable. Add maintenance to this unit, but remove assembly. Need to know how to fix blemishes in grain.</p>	Suggestion adopted - Element 1 rewritten.
<ul style="list-style-type: none"> <li>Multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	<p>Change element 1 to “prepare and maintain” - check wood, hoops, check for leakage, smell,</p>	Suggestion adopted - Element 1 rewritten.
<ul style="list-style-type: none"> <li>Multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	<p>Barrels would be treated as a raw material</p>	Suggestion adopted - Element 1 rewritten.
<b>FBPTEC3XX15 Filter fermented beverages</b>		
<ul style="list-style-type: none"> <li>RTO, Vic</li> </ul>	<p>This content is better as a separate unit. Support removing filtering from the 'wort production' unit.</p>	Great - thanks for the confirmation.
<b>FBPTEC4XX1 Manage raw materials</b>		
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>RE: Elements &amp; PCs</i> a very basic knowledge of what your materials should look/feel/smell right is important! For those completely new to industry with no exposure would need this info!</p>	<p>Agreed. New element added to unit that that covers identifying key attributes of quality raw materials. Observation and smell also added to Knowledge Evidence. (This unit could be delivered in conjunction with sensory analysis unit.)</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, QLD	<i>RE: Knowledge Evidence</i> beer specific- yeast, hops, malts, but WATER is also important and not to be overlooked. water quality and composition testing/where to find details on city water supplies etc	Suggestion adopted - water added to Knowledge Evidence. Some of the beer-specific materials left general so that unit can be delivered in different contexts - these details would be added to training materials.
• Industry, QLD	<i>RE: PC 1.1</i> Understanding of raw materials is more important and than this subject matter - and a precondition for it in the first place. This should be the tail-end of a unit based around understanding of raw materials and how they pertain to the production of the product.	Agreed. New element added to unit that that covers identifying key attributes of quality raw materials.
• RTO & Industry, NSW	<i>RE: PC 1.5</i> (1.5) key objective here is to not receive out of specification raw materials. Problem solving is an action for the supplier.	Suggestion adopted - PC removed (and this content is covered in FBPTec3001 Apply raw materials, ingredient and process knowledge to production problems).
• Multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	Raw materials unit should make sure there's content about assessing suppliers, making sure they are compliant (re: barrels)	Suggestion adopted - new element added to unit (Element 2).
<b>FBPTec4XX2 Manage wort production for brewing</b>		
• Industry, WA	<i>RE: Elements &amp; PCs</i> Grain and milling have a serious explosion risk which may need a separate hazard outcome to address it.	Suggestion adopted - added to PC 1.3, Performance Evidence and Knowledge Evidence (and would also be addressed in WHS unit).
• Industry, WA	<i>RE: PC 6.5</i> Add a point in for 6.5 for oxygenation of wort	Suggestion adopted.
• RTO, NSW	<i>RE: PC 4.1</i> if mash tun and lauter tun are combined this might be unnecessary - maybe add "if required"?	Suggestion adopted - reference to equipment made more generic.
• RTO, NSW	<i>RE: Application - typo</i> insert of	Suggestion adopted - typo corrected.
• RTO, NSW	<i>RE: Assessment Conditions - typo</i> add h	Suggestion addressed - reference to specific equipment removed (and with it the typo).

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>RTO, NSW</li> </ul>	<p><i>RE: Knowledge Evidence</i> may not expect to get yeast in wort prior to pitching which I guess would be part of fermentation rather than wort production</p>	Adopted - 'yeast count' removed from Knowledge Evidence.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	Biggest hazard during mash run is when putting grain in hottish water – breathing in the steam has the dust in it – bronchial tubes breathe it in. This is a hazard. Breathing dust in when it's in steam it will get in to bronchial tubes. PPE needs to be worn. Add working with dust, heat and steam to KE of units.	Adopted. Extra detail about dust, heat and steam added to PC1.3, and PC1.4 also added to cover PPE. Detail about dust, heat and steam also added to Knowledge Evidence.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	Hops bit in this unit needs to be optional so it can work for both distilling and brewing. Distilling doesn't use a kettle either. Element 5 is not relevant to distilling – they do not boil wort. This step is purely for beer. 5.1, 2, 3 not relevant (5.4, 5, 6 is across both processes). 6 not at all relevant – only beer.	Adopted - some detail removed, and separate unit developed for distilling.
<ul style="list-style-type: none"> <li>Industry &amp; RTO, NSW</li> </ul>	This unit seemed too prescriptive (quite detailed) compared to the existing units that are being reviewed. Not everyone will do exactly the same thing here. But unit is much better than what was available before.	Adopted - some detail removed, and separate unit developed for distilling.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	Remove Elements 4 and 5 to make a distilling-version only	Adopted - some detail removed, and separate unit developed for distilling.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training</li> </ul>	This unit is mandatory for brewing	Yes - incorporated as a 'must do' in Certificate IV packaging rules.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))		
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic</li> </ul> (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))	All steps in the unit are fine. Wort production informs the whole brewing process - does not feel it's over the top	Great- thanks for the positive feedback!
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	This wort unit is good at explaining the process and allowing it to be contextualised – could do for the distilling/still units	Adopted - wort production unit developed for distilling.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), WA</li> </ul> (attendees included Industry, WA Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM), Government Department)	A little too prescriptive for the variability of equipment available to undertake these tasks	Adopted - some detail removed, and separate unit developed for distilling.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	Reference to lauter tun – more broadly the separation process. Doesn't need to be done in lauter tun – can leave it as is in the unt, but clarify that the tun can be whatever you personally use to do separation process	Adopted - reference to lauter tun removed.
<b>FBPTEC4XX3 Manage cellar operations</b>		

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, WA</li> </ul>	<p><i>RE: Elements &amp; PCs</i> Yeast needs to be in this section</p>	Suggestion adopted - some reference to yeast added to this units, and a separate unit covering yeast developed and added to the core.
<ul style="list-style-type: none"> <li>Industry, WA</li> </ul>	<p><i>RE: Knowledge Evidence</i> yeast biology section</p>	Suggestion adopted - new unit on yeast added to the core.
<ul style="list-style-type: none"> <li>Industry, Qld</li> </ul>	<p><i>RE: Knowledge Evidence</i> yeast handling parameters, brewing specific as not covered by raw materials doc</p>	Adopted - new unit focussing on yeast developed.
<ul style="list-style-type: none"> <li>Industry, Qld</li> </ul>	<p><i>RE: Element 3</i> base filtration knowledge important, however many small or artisan breweries are not filtering. main filtration knowledge to be left as a skillset? EG: fine filtration+reverse osmosis+ rotary vacuume.</p>	Suggestion adopted - filtration removed from this unit and separate filtering unit developed.
<ul style="list-style-type: none"> <li>RTO, Vic</li> </ul>	<p><i>RE: Element 3 AND above comment</i> Agree with [above comment], lots of unfiltered beer these days especially when modified malts are so good, no need to filter</p>	Agreed - see above comment.
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<p><i>RE: PC 1.2</i> 1.2 could say CIP/Sanitise Also when is the yeast mentioned? major role, I will email.</p>	Suggestion adopted - CIP added to PC and Knowledge Evidence.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	<p>Unit hasn't spoken about yeast. There is a lot to cover with yeast that needs to be mentioned, but an indepth knowledge is going to be too much. Need to know affect of time, temperature and nutrition (macro and micro nutrition). Need to know where to get information about yeasts and tech shests for yeast that explain what it does</p>	Adopted - new unit focussing on yeast developed (and minimal yeast references also added to this unit).
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), NSW  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum</li> </ul>	<p>Need more about 'yeast' in the Knowledge Evidence – propagation, Yeast counts etc</p>	Adopted - new unit focussing on yeast developed.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Maintenance Managers (CMM))		
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), NSW  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	More on adjuncts needed	Adopted - new dot point added to Knowledge Evidence (adjuncts also included in PCs).
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), WA  (attendees included Industry, WA Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM), Government Department)</li> </ul>	Terminology being used is correct	Thank you.
<ul style="list-style-type: none"> <li>Industry, WA</li> </ul>	<i>RE: Element 3</i> there seem to be multiple units that could cover this. Separation process as one own unit instead of multiple could work and would apply to distilling as wekk.	Suggestion adopted - element 3 removed and new unit developed to cover filtration ( <i>FBPTEC3XX15 Filter fermented beverages</i> ).

#### **FBPTEC4XX4 Manage continuous still operations**

*NOTE: Feedback received through the "Drafts Available" phases indicated that this unit was unsuitable and did not correctly reflect the skill needs of the distilling sector.*

*Therefore, this unit has been abandoned, with relevant content included in the new unit FBPTEC4XX13 Manage still operations.*

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	I see the need of pointing out the difference of a Continuous Distillation and a Distillation in a Column Still witch is more used for distilling Fruit based wash for Schnapps, Eau de Vin, and then could be use for the making of Gin since it is often used a on batch distillation and not continuous distillation	This unit has been removed and some content moved to unit titled 'Manage still operations', including understanding the difference between a pot and column/continuous still in the Knowledge Evidence.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: Element 1</i> No mention of use of fores/feints and steam to start up the columns until a stead state is reached</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> . Suggestion adopted in new unit.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 1.2</i> Or wine or mark or molasses wash</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> . Suggestion adopted in new unit.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 1.3</i> botanicals aren't used in a continuous still operation (gin is made in a batch/pot operation)</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 2.1</i> A continuous still doesn't have a "kettle", but a wash feed line towards the top of the 1st column</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 2.3 &amp; 2.4</i> 2.3 + 2.4 don't seem relevant to this style of operation</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: Element 3</i> Botanicals are not relevant to this subject</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: Element 3 - boaticals (should be 4)</i> This doesn't sound like how to ramp down a continuous still, not mentioning ramping down and switching to feints receiver and steam, and cutting down supply to wash in line</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> . Suggestion adopted in new unit.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: Knowledge Evidence</i> Distillation doesn't produce methanol, it concentrates it</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), NSW  (attendees included Industry, RTO, National Industry)</li> </ul>	Not a lot of artisanal distillers do this process	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))		
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	Not a lot of artisanal distillers do this process	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>multiple attendees</li> </ul>	Column still could be used instead of continuous	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	Agree continuous process not relevant for artisanal producers	Suggestion adopted. Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	Knowledge Evidence looks good	Unit removed - some knowledge evidence moved to unit titled 'Manage still operations'
<ul style="list-style-type: none"> <li>Industry, SA</li> </ul>	Continuous still not relevant to artisanal - remove	Suggestion adopted. Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<b>FBPTEC4XX5 Manage pot still operations</b>		
<p><i>NOTE: Feedback received through the “Drafts Available” phases indicated that this unit was unsuitable and did not correctly reflect the skill needs of the distilling sector.</i></p> <p><i>Therefore, this unit has been abandoned, with relevant content included in the new unit FBPTEC4XX13 Manage still operations.</i></p>		



Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p>This unit doesn't make reference to recycling of Fores &amp; Feints (or in the case of some fruit products why not). Does not make mention to the aspects or reasons for different fractions collected separately.</p> <p>Requires mention of explosive atmosphere and legislation around this work environment.</p> <p>Confusing nomenclature around still components; does the word boiler refer to the steam boiler to raise steam to provide heat to equipment around site, or to the still pot where liquid boils. The still part is called the "Pot" the boiler is a separate bit of equipment, a kettle is the boiling vessel used in beer brewing</p>	<p>Unit reworked - now titled 'Manage still operations'. This unit makes reference to identifying options for using heads and tails of still run, explosives and risks (includes Australian Standard in Knowledge Evidence), nomenclature clarified.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 2.4</i> This sounds like a single companies SOP, not what would be suitable for general practice, 50C is potentially much lower than some people turn on their condenser at, or higher than others</p>	<p>Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i>. Suggestion adopted in new unit.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 2.6</i> The technical side behind this? A distillate running at 1% abv is roughly 0.1% in the pot</p>	<p>Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i>. Suggestion adopted in new unit.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 3.1</i> Why shut down the steam boiler? it can stay on for the next run</p>	<p>Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i>. Suggestion adopted in new unit.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 3.3</i> What wait for the still to cool down? it can be rinsed with hot water and used again Use of pot ale / spent lees for heat recovery for the net run?</p>	<p>Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i>. Suggestion adopted in new unit.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 3.4</i> Use "Low Wines" to charge the spirit still? This is typically a two still set up. Some small distilleries try to use a single still for both operations</p>	<p>Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i>. Language kept generic as suggested.</p>
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry,</li> </ul>	<p>change PC 1.3. Still is never pulled apart, so assemble is wrong. However CHECKING and SETTING is more correct (maybe don't need? – preparing is all you need)</p>	<p>Suggestion adopted. Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i>, with reference to assembling still removed as suggested.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO, National Industry Association)		
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas (attendees included Industry, RTO, National Industry Association)</li> </ul>	2.4 Not correct – remove temperature	Suggestion adopted. Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> , with reference to temperature removed as suggested.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas (attendees included Industry, RTO, National Industry Association)</li> </ul>	Can't control temperature in pot - this is determined by ratio of alcohol to water. Can control what goes in to the pot and monitor.	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas (attendees included Industry, RTO, National Industry Association)</li> </ul>	2.3 remove temperature probe – not all have this. Change to “monitor temperature at condenser”	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> , with 'use of temperature probe' removed as suggested.
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	Term “boiler” means something specific in industry. Refer to 'heating source' instead so this can refer to gas or heating element etc. (this applies to 2.1, 2.3 as well- and probably other areas)	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> , with 'boiler' removed as suggested.
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<i>RE: PC 2.6</i> Can't do this step on temperature	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> . Suggestion adopted in new unit.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas (attendees included Industry, RTO, National Industry Association)</li> </ul>	<i>RE: Knowledge Evidence</i> change 'Temp to cut alcohol' to “WHEN to cut alcohol”	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p><i>RE: Knowledge Evidence</i> important that instruments are related to ATO certification Record keeping would also maintain calibration schedules. It is important people are using certified calibration Scales and measures also important</p>	Suggestion adopted - content included in new unit 'Apply regulatory requirements to the production of alcoholic beverages'
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p><i>RE: Foundation Skills</i> Add reference to 'language used in the workplace'</p>	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> . Suggestion adopted in new unit.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	put more focus on sensory analysis to help flesh out the 'cut' side of things better.	Suggestion adopted - unit reworked. Please also note there is a new unit on sensory analysis.
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	Needs more of a focus on ensuring (usually when setting up) that there are things like understanding WHS, but also understanding the temperatures that elements boil off at, and explaining the process about what happens with what you do about your foreshots etc. Focus is on safety and quality and safety. How to treat and manage waste	Suggestion adopted - unit reworked. Also note separate WHS unit included in core of qualification. Detail of boil off points for alcohol is included as a dot point in the Knowledge Evidence of the revised unit - further detail about the temperatures that for each type of alcohol boils, and options for using tails of still run, would be added to a training material developed for this unit.
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	The way a still is powered can affect operations - different if using steam vs electricity	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	Different runs for different products need to be covered by this unit	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	Pot still assembly is not needed in this unit	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	Everyone manages temperature differently - some do more by feeling, some stills have an automatic process for cooling in case manual methods have been missed. Temperature also depends on the machine and where it is being measured.	Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i> .
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	Ordering of PCs is correct	Great - thank you.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p>PC 2.9 could be a separate element. This is very important for distilling and ATO requirements. A lot of what is required defines the process, so should be mentioned earlier in the process.</p>	<p>Unit removed – relevant content included in new proposed unit <i>FBPTEC4XX1 Manage still operations</i>. A new unit also created to cover legal requirements of record keeping</p>
<b>FBPTEC4XX6 Produce wash for distillation</b>		
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 2.1</i> Wash is made from grain or molasses, fruit is used to make wine (which in turn can be used to make brandy).</p>	<p>Suggestion adopted - PC 2.1 updated. Also, information added to unit Application to clarify that this unit covers raw materials such as fruit, potato, sugarcane - the production of grain-based wort is covered in <i>FBPTEC4XX12</i>.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 2.2</i> Pathogens don't grow in wash, it is the wrong conditions</p>	<p>Suggestion adopted - 'pathogens' removed.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 2.3</i> As per 2.1, does not seem to be the most relevant aspect, and fermentation is normally done with juice for making brandy, not on fruit</p>	<p>Suggestion adopted - 'fruit' removed.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: Element 2</i> No mention of wort production, which is required for making whisky New Make Spirit</p>	<p>Suggestion adopted - new unit developed to cover wort production for distilling.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: Element 3</i> Requires mention of yeast husbandry</p>	<p>Suggestion adopted - extra PC added. Also, minimal yeast information added to Knowledge Evidence) and new unit on yeast added to core of Certificate IV.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: PC 3.3</i> Easier to monitor decrease in sugar content (by density)</p>	<p>Suggestion adopted - 'sugar' added to PC 3.3.</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>Element 4</i> Why clarify the wash? wash for distillation should NOT be clarified, as this is important for flavour development</p>	<p>Suggestion adopted - element /PCs updated to refer to removing unwanted solids (which could be stones or pips) or threats to wash (as suggested below).</p>
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p><i>RE: Knowledge Evidence</i> Does sugar wash refer to molasses for rum making? No mention of wort production for whisky making. A fruit fermentation is called a wine</p>	<p>Suggestion to add 'molasses' to dot point in Knowledge evidence adopted. Note wort production is covered in separate unit (<i>FBPTEC4XX12 Manage wort production for distilling</i>). Other SMEs refer to 'fruit wash' for distillation.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO & Industry, Vic	<i>RE: Knowledge Evidence</i> Yeast shouldn't be allowed to floc and should carry over into the still	Suggestion adopted - reference to 'floculated yeast' removed from PC 4.1.
• RTO & Industry, Vic	<i>RE: Knowledge Evidence</i> Bitterness isn't a requirement for wash	Suggestion adopted - 'bitterness' removed from dot point.
• Industry, NSW	<i>RE: Elements &amp; PCs</i> Prepare Fruit by crushing is very important if you make fruit based products like Brandy, Eau de Vie, Schnapps	Thank you for the clarification.
• Industry, NSW	Don't see any major issues with this unit. Order of PCs is good. Knowledge Evidence looks good	Great – thanks for the feedback.
• Industry, NSW	Element 4 could refer to "separation of pips/stone and fruit" instead of "clear wash". Or "Remove potential threats to product" as different washes will be fermented differently.	Suggestion adopted - language in element 4 updated.
• RTO & Industry, SA	Could allow distillers to be more generic if people don't want to do barley malt wash. Can prepare without separating. Clarify this part with distillers	Detail clarified, unit updated as per feedback.
<b>FBPTEC4XX7 Blend spirits</b>		
• RTO & Industry, Vic	<i>RE: Elements</i> No mention of water quality for cutting, and the impact of water types	Suggestion adopted - PC added to element 1 and dot point added to Knowledge Evidence.
• RTO & Industry, Vic	<i>RE: PC 3.3</i> Barrels and vats can be empties without lifting (which is safer from manual handling)	Suggestion adopted.
• multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	Fix numbering – 1.1 is missing in PCs	Adopted - numbers updated.
• multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	3.3 and 3.4 very specific – what is using a pump. Remove? Change to combine, transfer...	Suggestion adopted - PC removed and other/s reworded.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, Tas	ATO recording might not be relevant in this unit. Perhaps better as a stand-alone unit?	Suggestion adopted - new unit developed to cover ATO requirements, but the recording aspect remains in this units to ensure records are completed as part of the job task.
• Industry, NSW	This unit isn't applicable in all distilling styles. Need to record everything that is taken out, even for blending. For artisanal, don't see this would be feasible due to ATO requirements and costs. Lots of legal implications here that need to be taken in to account (more so for non-whisky distilling)	The need for recording everything in and out is applicable in artisanal settings, and so the requirement for recording stays in. New unit developed to address ATO requirements.
<b>FBPTEC4XX9 Prepare for fermentation (now <i>FBPTEC4XX9 Prepare starter cultures for fermentation</i>)</b>		
• RTO, SA	<i>Re: Knowledge Evidence</i> vinegar, water kefir are not solely lactic ferments they are SCOBY ferments	Suggestion adopted - Knowledge evidence dot points updated.
• RTO, SA	<i>RE: Knowledge Evidence</i> this should be cultured condiments not just chilli sauce and cultured butter should be cultured dairy products and then the water kefir should be non-dairy kefir	Suggestion adopted - Knowledge evidence dot points updated.
• RTO, SA	<i>RE: Knowledge Evidence</i> meat products not listed	Meat addressed in separate unit.
• RTO, SA	<i>RE: Knowledge Evidence</i> "yeast and bacteria, including komucha" should read "yeast and bacteria SCOBY including kombucha, vinegar, kefir grains	Suggestion adopted - Knowledge evidence dot points updated.
• RTO, SA	<i>Comments in FBPTEC4XX10 also apply to this unit</i>	<i>Adopted as per responses in FBPTEC4XX10 section below.</i>
• RTO, SA	<i>RE: PC 2.1</i> nothing in here about checking the integrity and safety of the starter eg contamination with pathogenic organisms eg aflatoxin producing fungi in fungal starters	Suggestion adopted - extra PC added.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, SA	<i>RE: Application - Licensing</i> this statement is incorrect. Licensing exists for alcohol production, fermented dairy and meat production. Local regulations apply for commercial sale of food products including products such as kombucha. This comment also applies to FBPTEC4XX10	The statement says there are no occupational licensing requirements (as in licensed plumber, licensed electrician) and then goes on to say that there <b>are</b> legislative and regulatory requirements for food processing, as you point out. The second sentence has been updated to read "However, legislative and regulatory requirements for fermented food processing, and commercial sale of food and beverage products, exist so local requirements must be checked."
• RTO, SA	<i>RE: Elements &amp; PCs</i> nothing in elements or required knowledge about commercial vs non-commercial/uncertified starters	Knowledge evidence includes knowledge of " <b>•</b> natural starters versus commercial starters"
• RTO, SA	<i>Re: Performance Evidence</i> on at least 2 separate occasions for the same starter culture (repeatability)	Suggestion adopted - Performance Evidence updated
• Industry, Tas	Some table olive producers do use a starter culture I believe, although not common.	OK - thanks
• Industry, Tas	<i>RE: Performance evidence</i> Producing two different starter cultures likely to be hard to apply to olives as starters not commonly used.	Agreed – this unit is not included in the <i>FBPSSXXXX5 Artisan Olive Producer Skill Set</i> for this reason.
• Industry, Tas	<i>RE: Knowledge Evidence</i> Still helpful to understand concept of starter cultures. Measurements for olives include salinity testing – hydrometer	Great. Understanding the concept of starter cultures included in <i>FBPTEC4XX10 Control and monitor fermentation</i> .
• RTO, SA	Title needs to be changed to be clearer about creating a starter culture.	Suggestion adopted - unit title updated to 'Prepare starter cultures for fermentation'
<b>FBPTEC4XX10 Control and monitor fermentation</b>		

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, Qld	<i>RE: Foundation Skills - Numeracy skills</i> Brewers need to know how to think in hectolitres (hL).	Suggestion adopted but added to units that are brewing specific - <i>FBPTEC3XX15 Filter fermented beverages</i> and <i>FBPTEC4XX2 Manage wort production for brewing</i> . (This unit is covers multiple sectors and cannot be this prescriptive here).
• RTO, SA	<i>RE: Knowledge Evidence</i> there is no mention of licencing requirements for sale of fermented products eg licencing requirements for regulated and non regulated products	Application of unit includes a licensing statement that has been updated.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 11 what about the aerobic and facultative pathogens! we are assuming the term pathogens includes fungi, parasites and bacteria and their associated toxins	Suggestion adopted - dot point updated to read: 'risks of pathogens, fungi, parasites and bacteria associated with fermentation processes'.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 12 - what do you mean by this sentence? this appears to be a cheese specific statement - should read "How changes in pH indicate success or otherwise of the fermentation process"	Suggestion adopted.
• RTO, SA	<i>RE: PC 2.2</i> 2.2 should be "ingredients and adjuncts"	Suggestion adopted.
• RTO, SA	<i>RE: Elements &amp; Performance Criteria</i> need to add a new element Product testing and include in the performance criteria - in production testing and - conduct tests for release of final product including microbiological and physical/chemical testing"	Suggestion adopted - new element added.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 1 - this needs clarification as all fermented products require a starter organism. commercial licensing requires the addition of a known starter culture irrespective of the endemic microorganisms associated with the raw materials eg cabbage	Suggestion adopted - dot point rewritten.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 13 - this should reqd "aerobic/anaerobic requirements for specific fermentation processes"	Suggestion adopted - dot point updated.



Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, SA	<i>RE: Knowledge Evidence</i> tensions between FSC and fermentation process - this a dangerous angle - its almost giving permission to teach the illegal/non safe processes	Yes, but we had a specific request to include this dot point from SMEs who run businesses producing and selling fermented foods - they said it was important that people thinking about setting up a business know about these tensions, and that there are variations between local government/council auditing around this issue.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 3 this should read "ideal temperature to promote successful fermentation relevant to the product". the enzyme activity is only as a consequence of successful fermentation	Suggestion adopted.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 4 - remove reference to kombucha	Suggestion adopted.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 6 - salt and sugar are essential ingredients not adjuncts	Suggestion adopted.
• RTO, SA	<i>RE: Knowledge Evidence</i> point 15 - this appears to be a meat and cheese specific correlation	Suggestion adopted - dot point removed.
• RTO, SA	<i>RE: PC 2.9</i> 2.9 not all products need to be cooled and some are fermented in their finished packaging	Suggestion adopted (where required added to PC.
• RTO, SA	<i>RE: PC 2.7</i> 2.7 should read "stop fermentation when....to include food safety parameters eg pH, Aw	Suggestion adopted.
• RTO, SA	point 8 - this should include how to sanitise equipment and, where necessary, ingredients	Suggestion adopted.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, SA	<i>RE: Performance Evidence</i> does this mean that a student can pass this unit by producing a simple fermented product twice eg 2 batches of water kefir. This should be produce a minimum of 3 different fermented categories proficiently twice. The performance evidence requirements does not match the knowledge evidence categories	Suggestion adopted.
• RTO, SA	<i>RE: Knowledge Evidence</i> no reference is made to fermented meat products at all	Yes - fermented meat has been kept separate in new unit titled ' <i>FBPTEC4XX14 Produce fermented meat products</i> '.
• RTO, SA	<i>RE: Knowledge Evidence</i> why only sourdough - should be microbially assisted baked goods	Suggestion adopted.
• RTO, SA	<i>RE: Knowledge Evidence</i> natural vs commercial starters - needs to be reference to the Food Standards Code aspects relating to the legality of backslapping and mother culturing in certain fermented food categories. This a major food safety issue.	Suggestion adopted - dot point updated.
• Industry, Tas	<i>RE: Foundation Skills</i> Numeracy – calculate salinity	Suggestion adopted.
• Industry, Tas	<i>RE: Performance Evidence</i> Takes 9-15 months for whole table olives. The 2 occasions could be 2 batches started on the same day?	The Performance Evidence has been updated to ensure that it is robust (and not include just two samples of water kefir, for example. Two different batches could be started on the same day.
• Industry, Tas	<i>RE: Knowledge Evidence</i> Still helpful to understand concept of starter cultures. Measurements for olives include salinity testing – hydrometer	Agreed.
• Industry, Tas	<i>RE: Performance Evidence</i> ID contamination or spoilage in at least 3 different samples – not sure how this would be assessed – would it be picking out 3 from a selection in an assessment setting?	Yes, the assessment would need to be constructed in a way that allows the candidate to identify samples that are contaminated, and those that are not.
• RTO, SA	Knowledge Evidence a little too prescriptive as not relevant to all ferments.	Suggestion adopted – most of the Knowledge evidence has now been updated.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• RTO, SA</li> </ul>	Should add microbiology in this unit (as well as creating new separate microbiology/biochemistry unit)	Suggestions adopted - microbiology/chemical/physical tests added in a new element, and some detail about tests added to Knowledge Evidence. A new unit also developed and included in the core units in the Certificate IV.
<b>FBPTEC4XX11 Apply regulatory requirements to the production of alcoholic beverages</b>		
<i>No feedback received requiring action</i>		
<b>FBPTEC4XX12 Manage wort production for distilling</b>		
<i>No feedback received requiring action</i>		
<b>FBPTEC4XX13 Manage still operations</b>		
<i>No feedback received requiring action</i>		
<b>FBPTEC4XX14 Produce fermented meat products (now <i>FBPTECXX14 Produce fermented and dry-cured meat products</i>)</b>		
<ul style="list-style-type: none"> <li>• Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), WA</li> </ul>	Unit looks good and should be an elective in the qual, but it overlaps with AMPS314 - Ferment and mature product (and/or AMPX403 - Monitor and overview the production of Uncooked Comminuted Fermented Meat). We don't need 2 Units covering same learnings.	Yes - the units do cover similar content. Potential users of this draft unit have informed us that the AMP unit did not have enough coverage of the microbiology (particularly bacterial contamination) and chemistry required of an artisan maker, which has been addressed in this new unit.
<ul style="list-style-type: none"> <li>• RTO &amp; Industry, SA</li> </ul>	should read fermented and cured Also check the word Caccitora I believe it is Cacciatore	Suggestion adopted.
<ul style="list-style-type: none"> <li>• RTO, SA</li> </ul>	<p><i>RE: title</i></p> <p>What does this include - suggest that it needs to cover uncooked fermented and dry cured products (as per the product list in performance element) - if it is cover both cooked fermented and uncooked fermented then need to be very clear on this.</p> <p>Suggested wording changes in Application, Elements and PCs and Knowledge Evidence to reflect this.</p>	Suggestion adopted - title updated (along with Applications, PCs, Knowledge evidence).

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, SA	<i>RE: Application</i> How do we audit deep knowledge?  What is defined as small scale?	Suggestion adopted - 'deep' removed. Sentence reworked to remove 'small-scale' and include 'artisan' instead.
• RTO, SA	<i>RE: Element 1</i> Are we talking the food safety hazards and risks or WHS? Would suggest should be Food Safety	Element 1 refers to both 1.1 - 1.3 are Food safety, 1.4 and 1.5 are WHS.
• RTO, SA	<i>RE: PC 1.3</i> Presume by chemical hazards we mean incorrect/wrong use of additives such as chemical preservatives	Yes - wrong preservatives, wrong additives.
• RTO, SA	<i>RE: PC 1.4</i> How does 1.3 and 1.4 differ - join the two	Suggestion adopted - PC1.4 deleted.
• RTO, SA	<i>RE: PC 1.5</i> If Food safety element then this is not required as WHS is a core unit	Yes, but the unit could be delivered as a stand-alone unit.
• RTO, SA	<i>RE: PC 2.1</i> Need a section related to the specification /recipe as in what are the food standard code requirements depend on fermentation/curing type with regards to pH drop/ aW etc	Suggestion adopted - extra PC added (please advise on extra information required here).
• RTO, SA	<i>RE: PC 2.3</i> Suggest removing 'except curing boards'	Suggestion adopted.
• RTO, SA	<i>RE: PC 3.2</i> Why in this element again a WHS issue	Some reinforcement around using safe operating procedures when using equipment seems reasonable.
• RTO, SA	Suggested additional element around conducting tests	Suggestion adopted.
• RTO, SA	<i>RE: Foundation skills - numeracy</i> Is this a numeracy skill?	Suggestion adopted - dot point removed.
• RTO, SA	<i>RE: Performance evidence - products to be developed for assessment.</i> Are these the only products - should this be a prescribed list or examples only	Suggestion adopted - list remains and "other" dot point added to include the option for another product not listed.

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution	
<b>FBPTEC4XX16 Manage and propagate yeast</b>		
<ul style="list-style-type: none"> <li>Industry, Vic</li> </ul>	<p>Large breweries can satisfy this unit. Unsure if a microbrewer will be equipped to propagate yeast. This is an expensive set up. In our experience, many simply pitch dry yeast directly to their fermentation. If they do not complete this unit, they cannot gain qual as this is core. Perhaps the wording can provide some flexibility on the different methods of yeast utilisation.</p>	<p>Several stakeholders who work with small scale brewers have requested the development of this unit.</p>
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<p><i>RE: PC 3.1</i> This is a repeat of 2.2 above</p>	<p>Suggestion adopted - PC3.1 removed.</p>
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<p><i>RE: PCs</i> Multiple edits suggested in PC 1.1, 1.2, 1.3, 2.3, 2.4, 3.1.</p>	<p>Suggestions addressed/checked</p>
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<p><i>RE: Foundation skills</i> Referencing a standard document such as the ACSF provides much clearer requirements for training organisations.</p>	<p>The frameworks referenced are the ACSF and the CSfW - this is outlined in the CVIG. The contextualised comments are written for the actual task outlined in the unit, rather than standard lines from the frameworks themselves, which users often found vague.</p>
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<p><i>RE: Performance evidence</i> Summarising PCs is not providing details of performance evidence</p>	<p>Performance evidence has been revised - no assessment requirements are a direct summary of the performance evidence. The PE requirements combine details of the task/s to be performed and volume and/or frequency requirements.</p>
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum</li> </ul>	<p><i>RE: Reference to 'technical sheets for yeast products' in Knowledge Evidence?</i></p>	<p>Commercial yeast products are sold with 'technical sheets'</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Maintenance Manager (CMM), Vic		
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<i>RE: Reference to 'gravity of wort' in Knowledge Evidence</i> Is measuring specific gravity and performance criteria? If so it should be listed as such	Reference to wort removed - too brewing specific.
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<i>RE: Reference to 'gravity' in Knowledge Evidence</i> Is management of oxygen levels are required performance criteria. If so it should be listed as such	Reference removed - too brewing specific.
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<i>RE: 3 points in Knowledge Evidence</i> Are these PCs?	Knowledge evidence updated and mapped to PCs.
<b>FBPTEC5XX11 Design an artisan food production facility</b>		
<ul style="list-style-type: none"> <li>RTO &amp; Industry, SA</li> </ul>	Useful unit – no comments at this stage	Thank you!
<ul style="list-style-type: none"> <li>Industry, Qld</li> </ul>	This unit looks great!	Thank you!

## TEC Technical - Revised units of competency

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<b>FBPTEC3001 Apply raw materials, ingredient and process knowledge to production problems</b>	

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<p><i>No feedback received requiring action.</i> No changes proposed for this unit of competency – will not be included in Case for Endorsement.</p>		
<p><b>FBPTEC4002 Apply principles of food packaging</b></p>		
<p><i>No feedback received requiring action.</i> No changes proposed for this unit of competency – will not be included in Case for Endorsement.</p>		
<p><b>FBPTEC4003 Control food contamination and spoilage</b></p>		
<p><i>Note: this unit of competency is no longer proposed to have a title change. Instead references to “beverages” have been added to the content, with additional information to be provided in the Companion Volume Implementation Guide</i></p>		
<ul style="list-style-type: none"> <li>• Industry, Qld</li> </ul>	<p>No mention of product traceability post-packaging and distribution and subsequent recall planning. Once contaminated/ spoiled/ compromised product is in the market, a producer needs to know how to get it back out of the market, or at least warn the public of any risks.</p>	<p>There is an elective unit that focuses on product recalls, and units focussed on traceability are proposed in Skills Forecast for a future project.</p>
<ul style="list-style-type: none"> <li>• Industry, Tas</li> </ul>	<p>Add in KE about practical application of the science to the hygiene in the workplace and job role.</p>	<p>Suggestion adopted - dot point added to Knowledge Evidence</p>
<ul style="list-style-type: none"> <li>• Industry, WA</li> </ul>	<p>Fundamental practicalities are similar no matter what industry you're working in. Heat, temperature, time is all relevant.</p>	<p>Agreed.</p>
<ul style="list-style-type: none"> <li>• Industry, WA</li> </ul>	<p><i>RE: Food vs Beverage language</i> Beer is always treated as a food, treated that way with the Health Department, and safety plans. When audited, they are audited as a food production environment. Don't need beverage in the title. Others aren't bothered by food only being in the title – don't need to change it.</p>	<p>Suggestion adopted - 'and beverages' not added to title but added to content within unit (will become Release 2 - no code change).</p>
<p><b>FBPTEC4006 Apply an understanding of legal requirements of food production</b></p>		
<p><i>No changes proposed for this unit of competency – will not be included in Case for Endorsement.</i></p>		
<ul style="list-style-type: none"> <li>• Industry, Tas</li> </ul>	<p>Need full understanding of requirements of ATO. Allowable quantities and differences need to be known and understood. Awareness of how much allowed to be “out” in bottles, when doing mash run, what is the allowable difference gravity etc.</p>	<p>Suggestion adopted - new unit developed to cover legal requirements of alcohol production (<i>FBPTEC4XX11 Apply regulatory requirements to the production of alcoholic beverages</i>).</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	massive legal implication for giving advice in these areas. But these areas do need to be covered and very important.	Agreed - this unit remains as core in Cert IV qualification.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), SA  (attendees included RTO, Industry, National Government Department, SA Industry Association)</li> </ul>	Legal requirements for food is different to legal requirements for fermented beverages	Suggestion adopted - new unit developed to cover legal requirements of alcohol production <i>(FBPTEC4XX11 Apply regulatory requirements to the production of alcoholic beverages).</i>
<b>FBPTEC4008 Participate in product recalls</b>		
<i>No changes proposed for this unit of competency – will not be included in Case for Endorsement.</i>		
<ul style="list-style-type: none"> <li>Industry, Qld</li> </ul>	Needs to be taught in conjunction with FBPTEC4003X.	Suggestion will be added to Companion Volume.
<b>FBPTEC4009 Identify the physical and chemical properties of materials, food and related products</b>		
<ul style="list-style-type: none"> <li>Industry, Qld</li> </ul>	<i>RE: Comment in mapping re: removal of content</i> Why? It is one of the most important chemical reactions in brewing, among other trades.	Maillard reactions can still be covered where relevant, but not relevant in all cheese making sectors (and this is a cross-sector unit).
<b>FBPTEC4011 Establish process capability</b>		
<i>No feedback received requiring action.</i> No changes proposed for this unit of competency – will not be included in Case for Endorsement.		



## General feedback and comments

Acronyms - PC – performance criteria, PE – performance evidence, KE – knowledge evidence, AC – assessment conditions, SMEs – Subject Matter Experts

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution	
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<p>I have reviewed a sample of units and have some concerns with the structure of the new units. I request that you review all units within this project to ensure that they are constructed in a manner that best supports effective training delivery.</p> <p>In summary the issues I see are that;</p> <ol style="list-style-type: none"> <li>1. some Performance Criteria (PCs) do not reference actual 'performance',</li> <li>2. Foundation Skills – these are not documented according to a reference standard such as the ACSF which makes for great difficulty at the point of training delivery and when such training is audited,</li> <li>3. Performance Evidence – the evidence listed in some units does not reference tangible evidence that must be sighted, recorded etc. by an assessor to confirm achievement of the relevant PC. This field serves no purpose if it is populated with a precis of the PCs,</li> <li>4. Knowledge Evidence – in some cases evidence is required that is not part of the performance required as detailed in the PCs. It is not permissible to 'add in' required knowledge that is not a part of the achievement of the Performance Criteria.</li> </ol>	<p>All units have been reviewed to ensure they meet the <i>Standards for Training Packages 2012</i>. The project will include formal Editorial, Equity and Quality Assurance checks to ensure these standards are met.</p> <ol style="list-style-type: none"> <li>1. All PCs refer to actual 'performance' - all are written in active voice and begin with a verb - they all need to be 'performed'.</li> <li>2. The frameworks referenced are the ACSF and the CSfW - this is outlined in the Companion Volume Implementation Guide. The contextualised comments included in the Foundation Skills field are written for the actual task outlined in the unit, rather than standard lines from the frameworks themselves, which users often found vague.</li> <li>3. Performance evidence has been revised - no assessment requirements are a direct summary of the performance evidence. The PE requirements combine details of the task/s to be performed and volume and/or frequency requirements of that performance.</li> <li>4. All Knowledge Evidence points are mapped to the PCs as part of the development process – any that may have been not related have been removed in this current draft.</li> </ol>
<ul style="list-style-type: none"> <li>Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), Vic</li> </ul>	<p>I note that not all of the new units are 'housed' within qualifications, only within Skills Sets. This does not meet the Standards and will also cause issues for training implementation in Victoria. Essentially this approach may mean that industry has restricted access to the skills they are asking for, within Victoria, since only full qualifications receive government support.</p>	<p>All new units included in the project are included in qualifications.</p>
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry,</li> </ul>	<p>Add some advice in CVIG around required LLN requirements for some of these units and recommendations of prior knowledge</p>	<p>Agreed - this information will be added to the Companion Volume Implementation Guide.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO, National Industry Association)		
• Industry, Tas	pH and water level/activity vs. moisture - each is different - add to cheese units	Suggestion adopted - addressed in cheese units.
• multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	In CVIG there could be mention of skill sets around business related skill sets in BSB? Or quals with flexible packaging rules to bring in food units	Agreed - this information will be added to the Companion Volume Implementation Guide.
• multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	Skill set around marketing artisanal food & bev products? Business plans etc? Access to difference of opinions, importance of networking. This is important to Artisanal.	Suggestion adopted. 'Develop and review a business plan' added to 'FBPSSXXX7 Establish an Artisan Food or Beverage Business Skill Set'. Also, information to be added to Companion Volume Implementation Guide about marketing units/skill sets that could complement the quals and skill sets developed in this project.
• multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	Make a skill set around preparing and presenting artisan food?	Suggestion adopted - new unit developed ' <i>Prepare and present artisanal food and beverages</i> ' and ' <i>FBPSSXXX8 Present Artisan Food and Beverages Skill Set</i> '.
• multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)	Make another unit around preparing and presenting foods in general – presenting, knowing process of how they are made, and add this to the three “General” units from the cheesemonger skill set. Keep in mind this may step on hospitality toes?	

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p>In cheesemaking qualification, testing is covered in one unit - FBPCHE5001</p> <p>For Fermenting in Certificate IV, testing is covered in 2 units – FST4XX1 AND MSL973013 perform basic tests – Are both units needed in the core?</p>	<p>Other SMEs believe that both units are needed in the core of the Certificate IV, and in fact the requirement for knowledge around microbiology and chemistry has been added to. Also, it is worth noting that in the Diploma, FBPCHE5001 has MSL973013 as a prerequisite that is listed in the elective bank, but will need to be completed if candidates entering the qual do not already have it.</p>
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p>Where is grading of cheeses? Should be in the qualification or as a skill set? There are international standards for this.</p>	<p>Unfortunately this is out of scope for this project - suggestion added to Skills Forecast.</p>
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p>Could vacuum distilling be incorporated in to continuous distillation unit?</p>	<p>'Continuous distillation' unit removed, however this suggestion adopted by adding this process to Knowledge evidence of new '<i>Manage still operation</i>',</p>
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), NSW</li> </ul> <p>(attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</p>	<p>Does there need to be a general distillation unit?</p>	<p>Suggestion adopted - still units reworked into one titled '<i>Manage still operation</i>', covering the production of spirit</p>
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas</li> </ul> <p>(attendees included Industry, RTO, National Industry Association)</p>	<p>should have separate beer packaging/bottling unit that covers packaging for beer (incl. pasteurisation) and make sure is included in brewing elective list</p>	<p>Suggestion adopted – "<i>Manage filling and packaging of fermented beverages</i>" developed and added to brewing specialisation</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Tas  (attendees included Industry, RTO, National Industry Association)</li> </ul>	Does Artisan need to be in the title of these documents?	We have added 'artisan' back into the title of the Certificate IV because of the confusion over the work role in larger manufacturing sites where workers need more leadership skills.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	suggest adding “Performance Evidence and Knowledge Evidence should be demonstrated in situation/environment relevant to job role”	All assessment should be contextualised for candidate - this would be quality practice (covered by Standards for RTOs).
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	<i>RE: Performance Criteria</i> Implication that specifying “relevant to job role” in one bullet, suggests that rest of the bullet points don’t apply	A unit is about a job role and all delivery should be contextualised for learner.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity</li> </ul>	Add information around suggested delivery order in the CVIG. Suggest WHS is a priority unit	Suggestion adopted - delivery advice will be provided in Companion Volume Implementation Guide.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Council/Curriculum Maintenance Managers (CMM))		
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	<p>Include definition of "artisan" in the CVIG. Using scale is hard because some larger places still may consider themselves artisan.</p>	Suggestion adopted - definition will be included in Companion Volume Implementation Guide.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))</li> </ul>	<p><i>RE: use of word 'Artisan'</i> Suggest not worrying about getting caught up in the terminology – let industry argue over it. It's not relevant. Focus on the content.</p>	Good advice. We have added 'artisan' back into the title of the Certificate IV because of the confusion over the work role in larger manufacturing sites where workers need more leadership skills.
<ul style="list-style-type: none"> <li>RTO &amp; Industry, Vic</li> </ul>	<p>Units are currently split by equipment rather than output or intention. Would make more sense to base around purpose: * Producing spirit for maturation (eg for rum etc.) * Clear spirits (gins etc.)</p>	Suggestion adopted - still units reworked into one titled ' <i>Manage still operation</i> ', covering the production of spirit.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), Vic  (attendees included Industry, RTO, National Industry Association, Industry Training</li> </ul>	<p>Could just have 1 unit that's around all the different stills (Liz). Speak to someone produces/builds stills. Can then touch on all the different method/processes within that.</p> <p>Then 1 unit on the processes.</p>	Suggestion adopted - still units reworked into one titled ' <i>Mange still operation</i> '.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM))		
• Industry, NSW	Manual handling and food handling should be in all units. Hygiene is also very important.	Suggestion adopted - manual handling added to several units, hygiene/sanitation in several units - this content would also be covered in the WHS unit and the Control food contamination and spoilage unit.
• Industry Training Advisory Body /Skill Council/Skills Activity Council/Curriculum Maintenance Manager (CMM), WA	Performance Evidence in units is not specific enough - needs more detail	Suggestion adopted - performance evidence updated throughout to focus on the key tasks that need to be performed (alongside the elements and PCs).
• Industry, WA	<i>RE: Food vs Beverage language</i> Beer is always treated as a food, treated that way with the Health Department, and safety plans. When audited, they are audited as a food production environment. Don't need beverage in the title. Others aren't bothered by food only being in the title – don't need to change it.	Suggestions adopted - 'beverage' left out of titles of current units. Advice will be provided in the Companion Volume Implementation Guide to clarify this.
• multiple stakeholders (workshop attendees), WA  (attendees included Industry, WA Industry Association, Industry Training Advisory Body /Skill Councils/Skills Activity Council/Curriculum Maintenance Managers (CMM), Government Department)	Put advice in CVIG re: food vs beverage language. Also adding reference to beverages in Performance Evidence could work too. Just avoid changing the titles	

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), SA  (attendees included RTO, Industry, National Government Department, SA Industry Association)</li> </ul>	<p><i>RE: use of Artisanal in titles</i> Industry is unlikely to have a problem with 'Artisan' being in the titles of units/qualifications. The base learning is the same. Including or not including the word artisanal is going to annoy anyone – the word doesn't impact on learners or what they get or what employers look for. It won't impact overall.</p>	Suggestion adopted.
<ul style="list-style-type: none"> <li>multiple stakeholders (workshop attendees), SA  (attendees included RTO, Industry, National Government Department, SA Industry Association)</li> </ul>	<p>Microbiology/food science should be own unit. Create a unit that covers - Microbiology, spoilage, health risks- a combination of microbiology &amp; biochemistry - at a Diploma level and it should be CORE. Fundamental to all aspects of fermenting. (Note: FBPTEC4009 is not suitable as it is too general, too "food-techy".</p>	Suggestion adopted - new unit developed titled ' <i>Apply food microbiological and biochemical techniques and analysis</i> ' has been added to elective bank of Certificate IV qualification as input from other subject matter experts suggests this content is not as relevant to some sectors as others.
<ul style="list-style-type: none"> <li>Industry, SA</li> </ul>	<p>Some distilling places don't ferment, but agree microbiology unit should be in the core.</p>	Suggestion adopted - new unit developed titled ' <i>Apply food microbiological and biochemical techniques and analysis</i> ' has been added to elective bank of Certificate IV qualification as input from other subject matter experts suggests this content is not as relevant to some sectors as others.
<ul style="list-style-type: none"> <li>Government Department, National</li> </ul>	<p>There are ATO rules around measuring alcoholic strength that have to be followed EVERY thing that is done (alcohol moved, etc) is a record keeping rule for ATO Could see a unit just around responsibilities of record keeping, especially around excise.</p>	Suggestion adopted - new unit developed titled ' <i>Apply regulatory requirements to the production of alcoholic beverages</i> '.
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p>Create pre-fermentation and post-fermentation units</p>	<p>This suggestion was initially made to increase the number of units in the fermentation specialisation in the Certificate IV qualification. Updates to <i>FBPTEC4XX9 Prepare starter cultures for fermentation</i> and <i>FBPTEC4XX10 Control and monitor fermentation</i> have been made to strengthen their content.</p> <p>Additional new units <i>FBPTEC4XX14 Produce fermented meat products</i>, <i>FBPFST5XX1 Identify the microbiological and chemical properties of fermented food and beverages</i>, <i>FBPTEC4XXX16 Manage and</i></p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
		<i>propagate yeast</i> have been developed to provide additional fermentation options in the qualification.
• Industry, SA	Could create a new unit around secondary processing for fermenting - value-adding processing?	This would cross over into Food Processing and in some cases, hospitality and food preparation - these types of units already exist and could be included as electives.
• RTO, SA	In Performance Evidence of multiple units - "demonstrated once" is not enough. Need consistency. Need to include 2 or 3 types of fermentation and do this a couple of times. Suggest 3 products 3 times.	Suggestion adopted.
• Industry, SA	<p>Thank you for putting the documents up for comment</p> <p>I work in the hazardous areas classification and dangerous goods areas.</p> <p>Your outlines probably cover the information at a detail level However I just wanted to suggest some points to cover</p> <p>Safety of working with ethanol as flammable liquid</p> <ol style="list-style-type: none"> <li>1) Properties of liquid, if it leaks where vapour tends to end up if it leaks</li> <li>2) What can ignite it</li> <li>3) If it ignites</li> </ol> <p>From a business perspective you mention ATO However I don't see any mention of AS1940 However this could be because it so small.</p>	<p>Suggestions adopted - details about hazardous and flammable substances/explosive environments added to <i>FBPTEC3XX8 Prepare, fill and store barrels for aging spirits, FBPTEC4XX2 Manage wort production for brewing, FBPTEC4XX3 Manage cellar operations, FBPTEC4XX12 Manage wort production for distilling, FBPTEC4XX13 Manage still operations.</i></p>



<b>Stakeholder Comments and Identified Issues</b>		<b>Consideration and Proposed Resolution</b>
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p>Some egg products can't be made without approval - Have to talk to health departments about developing these products. Suggest adding something like - "Ensure health department requirements are addressed (including licensing) to develop product? If in doubt, contact health department" in units to cover this in multiple units.</p>	<p>Suggestion adopted - extra PC and knowledge dot point added to "Control and monitor fermentation".</p> <p>All fermentation units and skill sets have a statement about licensing and the need to check requirements with the local jurisdiction before delivery. This information will also be added to the Companion Volume Implementation Guide.</p>
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p>In handle food safely in a retail environment – subject to local government audit/inspection. Any food produced by these quals/units would be subject to local government food safety auditing. Putting in a retail environment specially creates more issues. Suggest reiterating this in the Companion Volume Implementation Guide.</p>	<p>Good suggestion - this information will be added to the Companion Volume Implementation Guide.</p>
<ul style="list-style-type: none"> <li>• Industry, Vic</li> </ul>	<p>Read through the new units and am happy with them.</p>	<p>Thank you for the confirmation.</p>

## Units of competency that will not be included in list of components proposed for endorsement in Case for Endorsement

Some units of competency were identified during the initial scoping of this project as possibly being suitable for inclusion in Artisan qualifications.

Feedback received indicated the following units were *not suitable* for an artisan production environment and have been removed from the project:

- FBPCEL3005 Operate the pressing process
- FBPCEL3006 Operate the fine filtration process
- FBPCEL3007 Operate clarification by separation (centrifugation) process
- FBPCEL3008 Operate the rotary vacuum filtration process
- FBPCEL3009 Operate the crossflow filtration process
- FBPCEL3011 Operate the reverse osmosis process.

The following units *are suitable* for inclusion the proposed artisan qualifications. No changes are required to these units of competency and therefore do not need to be included in the Case for Endorsement when submitted for endorsement:

- FBPOPR3004 Set up a production or packaging line for operation
- FBPPPL4002 Plan and coordinate production equipment maintenance
- FBPPPL4003 Schedule and manage production
- FBPPPL4007 Manage internal audits
- FBPTEC3001 Apply raw materials, ingredient and process knowledge to production problems
- FBPTEC4002 Apply principles of food packaging
- FBPTEC4006 Apply an understanding of legal requirements of food production
- FBPTEC4008 Participate in product recalls
- FBPTEC4011 Establish process capability.

## Appendix 1 – First summary of feedback for Certificate IV qualification

### Summary of feedback on draft of *Certificate IV in Fermented Food & Beverages*

(named *Certificate IV in Artisan Fermented Food & Beverages* at the time of feedback)

This feedback received during “Drafts Available” phase 29 January – 4 March 2019.

#### Comments related to Core Units

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, VIC	<i>RE: Core unit - FBPTEC4XX1 Manage raw materials</i> "perform basic analytical testing of raw materials, in process products, and finished goods"	Adopted - 'Perform basic analytical tests' added as a PC - also note units on Perform basic tests, and testing that is incorporated into practical, task specific, units.
• Industry, SA	<i>RE: Core unit - FBPTEC4006 Apply an understanding of legal requirements of food production</i> This is a really important one. Needs to cover excise as well for beer/spirits.	Yes - agreed. A new unit covering regulatory requirements for the production of alcohol has been developed and added to the Distilling and Brewing specialisations.
• Industry, NSW	<i>RE: Core units</i> Need to cover excise, barcodes, warning information, standard drinks, weights and measures, 10C deposit information	Yes - agreed. <i>FBPFST4009 Label foods according to legislative requirements</i> has been added to the core, and some of this information is also covered in the new unit about <i>FBPTEC4XX6 Apply an understanding of legal requirements of food production</i> .
• Industry, QLD	<i>RE: Core unit - MSMENV272 Participate in environmentally sustainable work practices</i> By no means is this irrelevant, but it should be relegated to an elective unit. Surely it would end up overlapping with basic legal environmental standards covered in FBPTEC4006.	Yes - agreed. This unit has been moved to the elective bank.
• Industry, QLD	<i>RE: Core units</i> Maintenance of Workplace Hygiene must be one of the most universally-applicable topics in food science and should therefore be its own core unit.	Yes - agreed. At AQF4, this information is included in <i>FBPTEC4003 Control food contamination and spoilage</i> and reinforced in practical task based units.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>RE: Core unit - FBPTec4XX1 Manage raw materials</i>  This seems far too vague. Raw materials are at the heart of all artisanal production and will vary from product to product. Understanding the raw materials themselves is far more important (for example, how is a brewer meant to understand a Certificate of Analysis of malt at intake if they don't understand the parameters they're supposed to be desiring?).</p>	Suggestion adopted. Further content added to the Knowledge Evidence of this unit including Certificates of Analysis and water.
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p><i>RE: Core units</i>  FBPPPL4002 should not be a core unit - fermented products (other than brewing or distillation products) often don't have complex equipment - this is a fermentation qualification</p>	Suggestion adopted - unit moved to elective bank.
<ul style="list-style-type: none"> <li>RTO, VIC</li> </ul>	<p><i>RE: Core units</i>  FBPPPL4002 Not sure this one belongs in core, agree with [above comment] that some equipment may not require this complexity, perhaps better as an elective.</p>	Suggestion adopted - unit moved to elective bank.
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p><i>RE: Core units</i>  Develop and maintain a HACCP based food safety plan should be in the core - swap this for the control food contamination unit</p>	Suggestion adopted - 'Develop and maintain food safety plan' included in core and the AQF 4 unit moved to elective bank.
<ul style="list-style-type: none"> <li>RTO, VIC</li> </ul>	<p><i>RE: Core units</i>  These core units seem to suit only a owner/manager role of a micro (smaller) fermenting business whether food or beverage. E.g. if there was only 3 staff in the business only one person would do all of these things.</p>	Suggestion adopted - core units revised to be more targeted toward owner/manager of artisanal food production business.
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p>sensory is good to have as a core in the Cert IV as this is important for artisanal</p>	Agreed - the unit remains in the core.
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p><i>RE: Core Units</i>  FBPTec4003 Control food contamination and spoilage – probably not as essential for distilling.</p>	The consensus from discussing this with representatives from industry and the SMEWG during the development of the qualification is that it wouldn't hurt for distillers to have skills and knowledge in this area.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, VIC	Good to have cleaning unit in the core	Agreed - 'Control food contamination and spoilage' remains in core.
• RTO & Industry, NSW	Some discussion around business units being in the core. Over half of students are undertaking similar qualifications to start their own business. But overall consensus was the BSB units should be elective as not always relevant	Agreed - BSB units/business plan unit remain in elective bank.
• Industry, SA	Develop and maintain a HACCP based food safety plan should be in the core	Agreed - this unit has been added to the core and the AQF4 unit moved to electives.
• RTO, SA	Maintenance unit should not be core. Not a lot of production equipment in some of the fermenting processes. Make elective.	Suggestion adopted - maintenance unit moved to electives.
• RTO, SA	Schedule and manage production unit should not be core	Suggestion adopted - unit moved to elective bank.
• Industry, SA	Disagree [ <i>with above</i> ] - <i>Schedule and manage production</i> should be in the core- it is critical to use product within a specific time frame. <i>Raw materials</i> unit does not cover this	Other industry subject matter experts do not share this view - unit moved to elective bank.
• RTO, VIC	<i>RE: Core units</i> Not sure about the maintenance unit as a core as not everyone will have a process that requires this level of qualification. I guess this is tricky because of the broadness of the qual. Even a micro brewer can have a very basic operation to brew.	Suggestion adopted - maintenance unit moved to elective bank.
• Industry, SA	Suggest removing <i>FBPTEC4006 Apply an understanding of legal requirements of food production</i> from core and putting in fermenting specification	Other industry subject matter experts do not share this view - unit remains in core.



## Comments related to Qualification coverage/title

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• RTO, VIC</li> </ul>	<p><i>RE: Qualification coverage</i></p> <p>The production of fermented food vs beverage production are vastly different processes. Are you sure you want package the two together? Too broad I think. This comment applies to the qualification description</p>	<p>Agreed - qualification reworked to focus on artisanal setting with just two specialisations (Distilling and Brewing). The qualification without the specialisations remains to focus on food.</p>
<ul style="list-style-type: none"> <li>• Government Department, WA</li> </ul>	<p>The main query in Western Australia is the size of the market for these qualifications and the likely demand for training in a very niche area. The workshop that took place in Perth focussed on Brewing, as the participants were from that industry, and they raise specific issues related to brewing that will need to be considered.</p>	<p>Suggestions from all workshops across Australia recorded and addressed. Full summary document of feedback received on all drafts will be available in the Validation phase.</p>
<ul style="list-style-type: none"> <li>• Industry, WA</li> </ul>	<p>Cert IV would work nicely for someone who wants to move in to more of a supervisor/team leader role. Would like to see a Cert III level as well – less hands on etc. that doesn't worry about production numbers etc.</p>	<p>Yes - Skills Impact have a work order for revising the Food Processing qualifications - the Certificate III will be addressed in that project that will commence mid-year. Please stay in touch.</p>
<ul style="list-style-type: none"> <li>• Industry, QLD</li> </ul>	<p>If there is any feedback I would want to give would be with the name i.e ...”in Fermented Food and Beverages”</p> <p>We got together to talk about a Brewing (and Distilling qualification). To me the name does not depict this.</p> <p>I would prefer the name to be “...in Brewing and Distilling”, even though it would be Brewing or Distilling in many cases.</p> <p>I cannot fully recall if we included or excluded a the process to produce for eg a beverage like Kombucha. If we did, then I can half understand the name, but I thought the focus was on Brewing in our group. And hence the name I propose talks directly to this core capability in the Cert and to me is more marketable too.</p>	<p>The title of the qualification is “Fermented Food and Beverages” as it does indeed cover brewing, but also distilling and other fermented products such as kombucha, table olives, miso etc. We have built the qualification to include specialisations so that if someone wanted to do the qualification for a brewing focus, their certificate at the end would read “<i>Certificate IV in Artisan Fermented Food and Beverages (Brewing)</i>”. (The same is true for distilling). We agree it would be nice to have a qualification just called “Brewing” but so many of the core skills apply across multiple disciplines and we would end up with duplicated qualifications (which the system will not permit). By having the specialisations in the one qualification and allowing these to be listed in the title, we hope this helps address that concern.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• RTO, VIC</li> </ul>	<p>We had a meeting with [industry organisation] in January and they were very excited about the prospect of a Cert 4 in Brewing as it would be a a great progression possibly from the Cert III in Food Processing we were doing with a brewing focus. This was until I showed them the package and the need for a student to work across the entire business, with managerial responsibility, and they were disappointed that this will not be an option for them.</p>	<p>The focus of this project is to be artisanal food production and the qualification has been renamed to ensure clarity. It could be a pathway from the Certificate III in Food Processing for some, otherwise perhaps the Certificate IV in Food Processing is a better option for a manufacturing setting.</p>
<ul style="list-style-type: none"> <li>• RTO, VIC</li> </ul>	<p>Very broad description and realise it needs to be as there is a massive difference between making beer versus making sauerkraut in terms of processes, equipment ect. It's a shame they can't be two different qualifications.</p>	<p>The qualification has been revised so that the discrete outcomes are clearer.</p>

### Comments related to Packaging Rules

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>• Industry, NSW</li> </ul>	<p><i>RE: Packaging Rules</i> Some level of chemistry and biology science is required</p>	<p>Suggestion adopted - new unit titled '<i>Identify the microbiological and chemical properties of fermented foods</i>' added to core.</p>
<ul style="list-style-type: none"> <li>• Industry, QLD</li> </ul>	<p><i>RE: Packaging Rules</i> All of Group C should be compulsory for all students.</p>	<p>Suggestion adopted - more emphasis on fermenting added to core through the units '<i>Identify the microbiological and chemical properties of fermented foods</i>' and '<i>Manage and propagate yeast</i>'.</p>
<ul style="list-style-type: none"> <li>• RTO, SA</li> </ul>	<p><i>RE: Packaging Rules</i> if you are doing a non brewing/distillation qualification ie fermented foods there are only 2 units in group C to choose so you are forced to do 2 brewing and/or distillation units which are not applicable - need a minimum of 4 units in the fermented food (group c).</p>	<p>Agreed - 'fermentation' specialisation removed.</p>



<b>Stakeholder Comments and Identified Issues</b>	<b>Consideration and Proposed Resolution</b>		
<table border="1"><tr><td data-bbox="152 204 376 347"></td><td data-bbox="376 204 1167 347">General Packaging rules say first 4 units can be from A,B,C, but if doing fermenting, no relevant units at the moment from the other groups. Need more units in Group C.</td></tr></table>		General Packaging rules say first 4 units can be from A,B,C, but if doing fermenting, no relevant units at the moment from the other groups. Need more units in Group C.	
	General Packaging rules say first 4 units can be from A,B,C, but if doing fermenting, no relevant units at the moment from the other groups. Need more units in Group C.		

## Comments related to Qualification level

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, NSW	<i>RE: Qualification level</i> We believe this should be a Diploma level qualification	When we analysed the level of the job tasks, or units, they align to the Australian Qualifications Framework (AQF) level 4, where workers are using "broad, factual, technical and theoretical knowledge in a specialised field", along with "specialist technical skills to complete routine and non-routine tasks and functions"... "cognitive skills to identify, analyse, compare and act on information from a range of sources"... quoted from the Australian Qualifications Framework 2011.
• Industry, QLD	<i>RE: Qualification level</i> Agree with [above comment] that this should be a Diploma-level qualification. There is otherwise nothing comparable at that level in this country and the scope of the subject matter is certainly there.	
• Industry, NSW	Why are Brewing and Distilling at Certificate IV level and Cheese at Diploma?	See above  The job tasks, or units, in the Cheese qualification align better to the descriptors at AQF 5 in the Australian Qualifications Framework 2011.
• RTO & Industry, NSW	If working in an artisan facility, you are responsible for everything. Maybe Diploma level more suitable?	See above.  Some small business units are added to the electives - they are also at AQF4.
• RTO & Industry, SA	If looking at hiring someone to set up/run brewery, would want a Diploma. It's controlling the operating of the business. Even in Artisanal, it's small teams, which requires broader knowledge	
• RTO, SA	Seems to be a lot of crossover with Diploma of Food Science and Technology	The core units have been revised to make more distinct from each other... qualification includes many new units at AQF4.

## Comments related to Elective units – Brewing specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, SA</li> </ul>	<p><i>RE: Elective units - brewing specialisation</i> Is packaging covered at all. Maybe in preventing spoilage. Pick up of dissolved oxygen is a big issue. this might be covered in food spoilage or transfer operations but to me would make sense to discuss in a packaging context because that is where the biggest risk of dissolve oxygen pick up generally occurs and all beers are going to need to be packaged in one form or another (bright tank, keg, can or bottle).</p>	<p>Suggestion adopted. There is a new unit added to the brewing specialisation - <i>Manage filling and packaging of fermented beverages</i>, which covers dissolved oxygen.</p>
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p><i>RE: Elective units</i> We feel that there should be one Beer Filtration UOC that covers plate and frame, DE, lenticular and centrifuge</p>	<p>Suggestion adopted. There is a new unit added to the brewing specialisation - <i>Filter fermented beverages</i>, which incorporates these methods</p>
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p><i>RE: Elective units - Brewing specialisation - FBPCEL2009 Carry out transfer operations</i> This should be replaced with the FBPBPG4XX1 Manage A BEER Packaging Process which covers Kegging, Bottling and Canning. Some focus on the role of pasterisation and dissolved oxygen must be included in this UOC</p>	<p>Suggestion adopted. There is a new unit added to the brewing specialisation - <i>Manage filling and packaging of fermented beverages</i>, which covers kegs, bottles and cans, also dissolved oxygen and pasteurisation.</p>
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p><i>RE: Elective units - brewing specialisation</i> Need to add a 4 Level Yeast Management UOC</p>	<p>Suggestion adopted - new unit titled '<i>Manage and propagate yeast</i>' added to core.</p>
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>RE: Elective units - brewing specialisation</i> If these electives are given equal weighting, they're extremely disproportionate to their relevance to the craft. A unit on "Raw Materials" is critical before the Wort can even be produced.</p>	<p>The sequence of delivery is up to the RTO to determine in their training and assessment strategy. The Companion Volume will include some information about suggested delivery sequences.</p>
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>RE: Elective units - brewing specialisation - FBPCEL2009 Carry out transfer operations</i> Many artisanal breweries won't even have 'transfer operations'. This unit would be better served by covering packaging overall.</p>	<p>Suggestion adopted - unit moved to elective bank.</p>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>RE: Elective unit FBPCEL2009 Carry out transfer operations</i>  Why is this elective code identical for both Brewing and Distilling? Why not make packaging a core subject? Even though there are bound to be differences between carbonated and non-carbonated liquids.</p>	<p>Suggestion adopted - unit moved to elective bank. Units should always be contextualised to suit need/context.</p>
<ul style="list-style-type: none"> <li>RTO, VIC</li> </ul>	<p><i>RE: Elective units - brewing specialisation - FBPTec4XX2</i>  <i>Manage wort production</i>  Very big unit here, what if the brewer does not mill their own grain? Can't use this elective</p>	<p>Agreed - it is a big unit. Even if a brewer does not mill their own grain, in an artisanal setting it's still worth training around this topic so that candidates know what the process entails.</p>
<ul style="list-style-type: none"> <li>RTO, VIC</li> </ul>	<p><i>RE: Elective Units - Brewing specialisation</i>  There are only 3 listed but jammed packed with lots of equipment and processes. E.g. what if in wort production unit you do not have a mill but buy your milled malt in? Or if you do not have a lauter tun? With cellar operation – what if you do not filter? (cloudy beers), some buy in their yeast other propagate??</p>	<p>Suggestion adopted - some of the equipment specific language has been removed from the unit about wort production (e.g. lauter tun has been removed from PCs), and the element on filtering has been removed (and new unit created).</p>
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>RE: Brewing units</i>  "Operate the pressing process" doesn't fit  "Operate the reverse osmosis process" doesn't fit</p>	<p>Suggestion adopted. The two units referred to have been removed from the elective bank.</p>

## Comments related to Elective units – Distilling specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>RTO &amp; Industry, NSW</li> </ul>	<p><i>RE: Elective units - distilling specialisation</i> Blending Spirits just with spring water or turning it into a Liqueur with the addition of sugar and what legal requirement is in place for that to call it a liqueur.</p>	Suggestion adopted. Information added to 'Blend spirits' unit (and also some info in Apply regulatory requirements to the production of alcoholic beverages).
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p><i>RE: Elective units - distilling specialisation</i> none of these distilling units have any component of fermentation - these are all processes post fermentation. Students could in fact do a Distilling or brewing streams without even covering fermentation at all</p>	Suggestion adopted. Units on fermentation added to core and Manage wort production for distilling and Manage cellar operations added to Distilling specialisation.
<ul style="list-style-type: none"> <li>Industry, SA</li> </ul>	<p>Maintenance, excise, operate still are all Distilling core requirements. Cellar ops for brewing needs to really be in distilling spec too, otherwise there's no fermentation part of distilling.</p>	Suggestion adopted - <i>Manage cellar operations</i> added to Distilling specialisation.
<ul style="list-style-type: none"> <li>Industry, SA</li> </ul>	<p>Management of hazardous materials needs to be fleshed out more – should be core in distilling, or embedded prominently in these distilling units</p>	Suggestion adopted - emphasis on hazardous materials/PPE added to distilling specific units.
<ul style="list-style-type: none"> <li>unknown</li> </ul>	<p><i>RE: Elective units - distilling specialisation</i> I would have thought that all "electives" A,B,C &amp; D are all crucial steps in distilling and not ones that could be "electives" or left out.</p>	Yes, all the units in a specialisation would be mandatory if the candidate chooses to undertake a qualification with a specialisation. The packaging rules have been reworked so hopefully clearer now.
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p>Produce wash for distilling might not be suitable in distilling as not all distillers do it</p>	Agreed, but others think it would be reasonable for distillers to learn about it (see comment below).
<ul style="list-style-type: none"> <li>Industry, Tas</li> </ul>	<p>Expect someone learning to be a distiller would need to know how to do this skill (produce wash for distilling). Would suggest keeping it in.</p>	Suggestion adopted - 'Produce wash' unit left in Distilling specialisation.



## Comments related to Elective units – Fermenting specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>RTO &amp; Industry, NSW</li> </ul>	<p><i>RE: Elective units - fermenting specialisation - FBPTec4XX9 Prepare for fermentation</i></p> <p>Does FBPTec4XX9 cover all sources of fermentable product (eg. Grain, Potato, Sugercane, Molasses, Grape, Fruit)</p>	<p>They could be covered in FBPTec4XX9, but 'potato, sugar cane, molasses, grape, fruit' have been added to <i>FBPTec4XX6 Produce wash for distillation</i>.</p>
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p><i>RE: Elective units - fermenting specialisation</i></p> <p>the units in group c should be core units as the qualification is a fermentation qualification</p>	<p>Suggestion adopted - qualification reworked so that core now includes units covering fermentation. Fermentation specialisation removed and covered in a new skill set.</p>
<ul style="list-style-type: none"> <li>Government Department, WA</li> </ul>	<p>Fermented meat should be added to this qualification. Could also have a fermented meat skill set</p>	<p>Suggestion adopted - new unit titled <i>Produce fermented meat products</i> added to elective bank.</p>
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p><i>RE: Elective units - fermenting specialisation</i></p> <p>Group C should include fermented meat production</p>	
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p>Fermented meats should be included. There is a unit in the AMP Meat Processing Training Package but it does not cover everything needed.</p>	

## Comments related to Elective units – General comments

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, SA</li> </ul>	<p><i>RE: Elective unit SIRRFSA001 Handle food safely in a retail environment</i></p> <p>I wouldn't have this as an applicable elective in this manufacturing certificate. Food safety for beer and spirits is really handled at the production side and there isn't much you can do in a retail setting to really impact on that.</p>	<p>This unit was originally proposed for inclusion by the SMEWG, suggesting it be added as an elective to cover the need to serve food/conduct tastings at an artisanal production site. This was again raised later during the consultation workshops, with industry saying there is a need for multi-skilled workers who can participate/manage the artisan food/beverage production, as well as being able to participate in retail activities if required. (An additional new unit titled 'Prepare and present artisanal food and beverages' has also been added to the elective bank to support this need, along with a new skill set <i>FBPSSXXX8 Present Artisan Food and Beverages Skill Set</i>.)</p> <p>This unit - <i>SIRRFSA001 Handle food safely in a retail environment</i> - is included as an elective in this qualification which means it is not compulsory for delivery. Candidates may choose to undertake this unit if it is relevant to their learning needs. (A note that <i>FBPTEC4006 Apply an understanding of legal requirements of food production</i> is in the core of the qualification and covers food safety at the production side.)</p>
<ul style="list-style-type: none"> <li>Industry, NSW</li> </ul>	<p><i>RE: Elective unit SIRRFSA001 Handle food safely in a retail environment</i></p> <p>Agree with [above comment]</p>	
<ul style="list-style-type: none"> <li>Industry WA</li> </ul>	<p><i>RE: Elective unit SIRRFSA001 Handle food safely in a retail environment</i></p> <p>Agree with [above comment]</p>	
<ul style="list-style-type: none"> <li>Industry, WA</li> </ul>	<p>I would like to see some elective units around sales and marketing.</p>	<p>Some business units already in elective bank. Packaging Rules allow for selection of 3 units of competency from other training packages - further advice on other potentially suitable sales/marketing units will be provided in the Companion Volume Implementation Guide.</p>
<ul style="list-style-type: none"> <li>Industry, SA</li> </ul>	<p><i>RE: Elective units - Other electives group</i></p> <p>The three electives involving separation/filtration and even RO shouldn't all be able to be picked in order to provide a good cross section of understanding in the craft industry. There is too much else to know to be competent.</p>	<p>Suggestion adopted - the separation/filtering units have been removed from the elective bank.</p>
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>RE: Elective unit FBPTEC3001 Apply raw materials, ingredient and process knowledge to production problems</i></p>	<p>There's a bit of a difference with this unit in that it focuses on identifying problems with raw materials - also acknowledge some cross-over - if it's chosen as an elective it could be clustered for delivery.</p>



Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	All this seems to do is go over old ground covered by any assessment of the core units based around Quality Control.	
• Industry, QLD	<i>RE: Elective unit FBPFST5008 Develop a new food product</i> Should be utilised as a compulsory summary assessment for all artisanal producers, as a means for students to apply all the knowledge they have acquired.	This feedback was considered by the SMEWG and concluded that this unit will not be relevant for all candidates, so they have decided that it remains as an optional elective. They did however agree that RTOs may choose to deliver this unit in the way you have suggested.
• Industry, QLD	<i>RE: Elective unit FBPCEL3009 Operate the crossflow filtration process</i> This seems too niche and could otherwise be covered under raw materials and/ or packaging units.	Suggestion adopted - this unit has been removed from the elective bank.
• Industry, QLD	<i>RE: Elective unit SIRRFSA001 Handle food safely in a retail environment</i> Not relevant for beverage technologies, unless it were to be around bar line setup principals for beer.	Other stakeholders have requested this unit be included as an elective to cover the need to serve food/tastings at an artisanal production site and are fully aware that it won't be relevant for all users.
• Industry, QLD	<i>RE: Elective unit - FBPCEL3011 Operate the reverse osmosis process</i> This seems too niche and could otherwise be covered under raw materials and/ or packaging units.	Suggestion adopted - this unit has been removed from the elective bank.
• Industry, QLD	<i>RE: Elective unit FBPFST4009 Label foods according to legislative requirements</i> This should be able to be covered under FBPTEC4006.	This unit specifically emphasises legislative requirements related to labelling products, whereas <i>FBTEC4006 Apply an understanding of legal requirements of food production</i> is much broader unit and covers multiple areas include Food Standards Code, WHS/OHS, import/export legislation etc. as they apply to the workplace. The units could be delivered together to address any cross-over in content.
• Industry, Tas	<i>RE: Elective unit MSL922001 Record and present data</i> How is this meant to be an entire unit? Wouldn't it be implicitly taught and then assessed throughout all other units? If a	It's an AQF level 2 unit, and some of the content does cross-over with practical units where details need to be recorded. It allows for some extra focus in this area should candidates require it.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	candidate can't record and present data, they presumably won't pass any other unit.	
• RTO, SA	<i>RE: Elective unit FBPFYSY5001 Develop a HACCP-based food safety plan</i> This should just be incorporated into the core unit FBPSY4001.	FBPFYSY5001 has been moved to the core, and FBPFYSY4001 now an elective. (see comments in <i>Core Units</i> section of this document).
•	Add business plan unit to electives in Cert IV AND also 'start-up' skill set	Suggestion adopted - ' <i>Develop and review a business plan</i> ' unit added to elective bank and <i>FBPSSXXXX7 Establish an Artisan Food or Beverage Business Skill Set</i> has been developed.
•	Maybe have a "business operations" style grouping in the qualification?	Trying to keep the focus on artisanal food. The Companion Volume Implementation Guide will include details about 'business operations' units/skill sets that may be undertaken to develop skills in this area.

### Comments related to Elective units – Entry Requirements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, QLD	<i>RE: Entry Requirements</i> Could there not at least be a prerequisite of basic numeracy and literacy skills? At the very least, having passed subjects in Year 10 would be relevant. Chemistry and biology will help, but should not necessarily be prerequisites, as they can be taught at this level.	Entry requirements bring many issues and can create unintended barriers. Robustness is built into units instead. Some advice about skills of potential learners will be provided in a Companion Volume.
• RTO, SA	Build in the robustness in the units and quals themselves, not as an entry requirement.	Agreed.

## General qualification comments

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
<ul style="list-style-type: none"> <li>Industry, QLD</li> </ul>	<p><i>General comment</i> Beverage Technology alone would be a hard enough qualification to teach but would at least have wide-ranging applications. Whether the liquid is fermented or not should not have to be the limiting factor. Food should be removed from this qualification.</p>	<p>Comments noted - the qualification has been reworked so that the specialisations are only for Brewing or Distilling. A general <i>FBP4XX19 Certificate IV in Artisan Fermented Food and Beverages</i> could be delivered to address artisanal food production.</p>
<ul style="list-style-type: none"> <li>RTO, SA</li> </ul>	<p><i>RE: General Comments</i> Interesting that this is a qualification in fermentation yet there is no fermentation microbiology and biochemistry content at all - small amount of micro in control food contamination and spoilage unit but this is not the right perspective. At a Cert IV level there needs to be an understanding of the fermentation and biochemistry processes and the microbes involved</p>	<p>Suggestion adopted. The core now includes new units titled <i>Identify the microbiological and chemical properties of fermented foods</i> and <i>Manage and propagate yeast</i>. Wort units also include coverage of fermentation.</p>