

**29 June 2016**  
**[16–16]**

## **Call for submissions – Application A1119**

### **Addition of Water to Facilitate Wine Fermentation**

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FSANZ has assessed an Application made by the Winemakers' Federation of Australia to permit the addition of water to dilute high sugar musts to aid fermentation in the production of wine, sparkling wine and fortified wine and has prepared a draft food regulatory measure. Pursuant to section 31 of the *Food Standards Australia New Zealand Act 1991* (FSANZ Act), FSANZ now calls for submissions to assist consideration of the draft food regulatory measure.

For information about making a submission, visit the FSANZ website at [information for submitters](#).

All submissions on applications and proposals will be published on our website. We will not publish material that is provided in-confidence, but will record that such information is held. In-confidence submissions may be subject to release under the provisions of the *Freedom of Information Act 1991*. Submissions will be published as soon as possible after the end of the public comment period. Where large numbers of documents are involved, FSANZ will make these available on CD, rather than on the website.

Under section 114 of the FSANZ Act, some information provided to FSANZ cannot be disclosed. More information about the disclosure of confidential commercial information is available on the FSANZ website at [information for submitters](#).

Submissions should be made in writing; be marked clearly with the word 'Submission' and quote the correct project number and name. While FSANZ accepts submissions in hard copy to our offices, it is more convenient and quicker to receive submissions electronically through the FSANZ website via the link on [documents for public comment](#). You can also email your submission directly to [submissions@foodstandards.gov.au](mailto:submissions@foodstandards.gov.au).

There is no need to send a hard copy of your submission if you have submitted it by email or via the FSANZ website. FSANZ endeavours to formally acknowledge receipt of submissions within 3 business days.

### **DEADLINE FOR SUBMISSIONS: 6pm (Canberra time) 10 August 2016**

Submissions received after this date will not be considered unless an extension had been given before the closing date. Extensions will only be granted due to extraordinary circumstances during the submission period. Any agreed extension will be notified on the FSANZ website and will apply to all submitters.

Questions about making submissions or the application process can be sent to [standards.management@foodstandards.gov.au](mailto:standards.management@foodstandards.gov.au).

Hard copy submissions may be sent to one of the following addresses:

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## Executive summary

FSANZ has assessed an Application from the Winemakers' Federation of Australia (WFA) seeking to amend existing Standards in the *Australia New Zealand Food Standards Code* (the Code) dealing with the timing and purpose of adding water during wine production.

The Australian wine industry has issues with what are termed “stuck” fermentations, which are fermentations that do not proceed smoothly to completion, but require various interventions in the winery to resolve. Such “stuck” fermentations are slow fermentations that take longer to complete and so often require additional interventions. It is also possible that they may produce sub-standard wines.

The Application states the wine industry believes the occurrence of “stuck” fermentations is increasing due to shorter, warmer vintage (grape harvest) periods. Shorter, warmer vintages are claimed to produce, and likely to continue to increase, the chances of more harvested grapes with higher than optimal sugar contents. It is also claimed they can cause a more compressed vintage period that causes logistical problems in the winery, exacerbating the problems of high sugar grapes.

The Application proposes a method wineries can use to limit “stuck” fermentations i.e. diluting high sugar musts (grape juice before yeast is added to initiate fermentation) by adding water. However, no provisions exist in the Code that allows for this remedy.

The Code contains strict provisions on when wineries can add water during wine production, which are detailed in the Australia only Standard 4.5.1 – Wine Production Requirements and in the definition of wine contained in Standard 1.1.2 – Definitions used throughout the Code.

Wine regulations in the United States of America (USA) in the Code of Federal Regulations allow water addition to “facilitate fermentation” in a similar way to that proposed by the Application. In the European Union wine regulations, water is prohibited during wine production “except where required on account of a specific technical necessity”.

FSANZ has accepted the arguments and justification provided in the Application and notes the proposed provision to use water to dilute high sugar musts to limit “stuck” fermentations is similar to that in the USA regulations.

Therefore, FSANZ has proposed amending relevant water use provisions in the production of wine in the definition of wine in Standard 1.1.2 to facilitate fermentation. FSANZ has also proposed an added provision when water is incidental to the winemaking process to be more consistent with Standard 4.5.1, international regulations and normal winemaking practices. FSANZ also proposes amending Standard 4.5.1 to provide a provision to add water to high sugar grape must to facilitate fermentation. However, a limit has been proposed that the dilution must not dilute the grape must below 15 degrees Baumé (Bé) which is also a measurement of grape sugar content. The Australian wine industry is more familiar with degrees Baumé than degrees Brix used in the USA.

# 1 Introduction

## 1.1 The Applicant

The Applicant is the Winemakers' Federation of Australia (WFA), the national peak body for Australia's winemakers.

The WFA also consulted with the Australian Grape and Wine Authority (AGWA) during preparation of the Application. The AGWA is an Australian Government statutory service body for the Australian grape and wine industry which has responsibility for Research, Development and Extension, market development and regulatory (essentially wine exports) activities.

The WFA also consulted with the peak New Zealand wine industry body, the New Zealand Winegrowers, which also supported the Application in principle, though it was felt this is not an issue for New Zealand wineries.

## 1.2 The Application

The purpose of the Application is to amend existing Standards in the *Australia New Zealand Food Standards Code* (the Code) dealing with the timing and purpose of adding water during wine production.

The Australian wine industry has issues with what are termed "stuck" fermentations, which are fermentations that do not proceed smoothly to completion, but require various interventions in the winery to resolve. "Stuck" fermentations are slow fermentations that take longer to complete and so often require additional interventions in the winery. It is also possible that they may produce sub-standard wines.

The Application states the wine industry believes the occurrence of "stuck" fermentations is increasing due to shorter, warmer vintage (grape harvest) periods. Such shorter, warmer vintages are claimed to produce, and likely to continue to increase the chances of, more harvested grapes with higher than optimal sugar contents. It is also claimed to cause a more compressed vintage period that causes logistical problems in the winery exacerbating the problems of high sugar grapes.

The Application proposes a method wineries can use to limit "stuck" fermentations by diluting high sugar musts (grape juice before the addition of yeast to initiate fermentations) by adding water. However, no provisions exist in the Code that allows such a remedy.

There are limited conditions on when wineries can add water during wine production as detailed in the Australia only Standard 4.5.1 – Wine Production Requirements and in the definition of wine contained in Standard 1.1.2 – Definitions used throughout the Code).

## 1.3 The current Standards

### 1.3.1 Australia and New Zealand

There are three Standards in the Code that are relevant for wine production and they have requirements related to when water can be added during wine production.

#### 1.3.1.1 Standard 4.5.1

Standard 4.5.1 is an Australia only Standard, which includes the requirements for the production of wine in Australia. All wine produced in Australia needs to meet the

requirements in Standard 4.5.1.

Subclause 5(7) of Standard 4.5.1 contains requirements when water can be added during wine production.

- (7) *Wine, sparkling wine and fortified wine may contain added water in proportion not exceeding 70 mL/L where that water is necessary for the incorporation of any substance specified in clause 3 or clause 4, or where that water is incidental to the winemaking process and where the presence of water in wine is in conformance with good manufacturing practice.*

There is no provision in this subclause to use water to dilute high sugar musts to limit the occurrence of “stuck” fermentations.

#### **1.3.1.2 Standard 2.7.4**

The Code has a general Standard for wine (Standard 2.7.4) which applies to food sold as wine and wine product in both Australia and New Zealand.

“Wine” is defined in Standard 1.1.2 with a cross reference to section 1.1.2—3 provided in the Note in section 2.7.4—2.

Section 2.7.4—3 requires that food sold as wine must be wine.

#### **1.3.1.3 Standard 1.1.2**

The definition of wine is provided in subsection 1.1.2—3(2). This definition is cross-referenced in a Note to section 2.7.4—2 and any changes to the wine definition in Standard 1.1.2 will require a consequential amendment to the Note in Standard 2.7.4.

### **1.3.2 The United States of America**

In the United States of America (USA) the Federal agency, the Alcohol and Tobacco Tax and Trade Bureau regulates the production of alcoholic beverages including wine. The regulations for production of wine are contained within Title 27 (Alcohol, Tobacco Products and Firearms) of the US Code of Federal Regulations (CFR). There are specific provisions for the addition of water during wine production within Part 24 (Wine) of Title 27, as copied below.

#### **§24.176 Crushing and fermentation**

*(a) Natural wine production. Water may be used to flush equipment during the crushing process or to facilitate fermentation but the density of the juice may not be reduced below 22 degrees Brix. However, if the juice is already less than 23 degrees Brix, the use of water to flush equipment or facilitate fermentation is limited to a juice density reduction of no more than one degree Brix. At the start of fermentation no material may be added except water, sugar, concentrated fruit juice from the same kind of fruit, malo-lactic bacteria, yeast or yeast cultures grown in juice of the same kind of fruit, and yeast foods, sterilizing agents, precipitating agents or other approved fermentation adjuncts. Water may be used to rehydrate yeast to a maximum of two gallons of water for each pound of yeast; however, except for an operation involving the preparation of a yeast culture starter and must mixture for later use in initiating fermentation, the maximum volume increase of the juice after the addition of rehydrated yeast is limited to 0.5 percent. After fermentation natural wines may be blended with each other only if produced from the same kind of fruit.*

#### **§24.246 Materials authorized for the treatment of wine and juice**

*(2) Where water is added to facilitate the solution or dispersal of a material, the volume of water added, whether the material is used singly or in combination with other water based treating*

*materials, may not total more than one percent of the volume of the treated wine, juice, or both wine and juice, from which such wine is produced.*

As noted in section 24.176 (Crushing and fermentation) the above water may be used to facilitate fermentation, which can be taken to mean dilution of the must, before fermentation commences. However, there are limits imposed. The first limitation is that the density of the juice (must) must not be reduced below 22 degrees Brix (a measure of sugar content). The second condition is that if the original juice is already less than 23 degrees Brix, then the juice cannot be diluted using water by more than one degree Brix.

Article 3 (Scope and Coverage) of the bilateral agreement on wine between the European Union and the USA called the “Agreement between the European Community and the United States of America on trade in wine”<sup>1,2</sup> includes a condition that wine “contains no artificial coloring, flavoring or added water beyond technical necessity”. This could be understood to include dilution of high sugar must before fermentation commences.

### **1.3.3 World Wine Trade Group (WWTG)**

The WWTG is an informal association of national representatives of wine producing countries interested in participating in networking and information sharing to provide better access to international wine markets. Australia, New Zealand and the USA were some of the original members of the WWTG; the other original members were Argentina, Canada, Chile, South Africa and Brazil.

The WWTG 2001 Mutual Acceptance Agreement (MAA) on Oenological Practices (MAA)<sup>3</sup> recognises that each WWTG member has established acceptable mechanisms for regulating wine-making practices, and in turn agrees to accept the wine-making practices of all other Parties. This means that wine produced in the USA with the addition of water to dilute must before fermentation is permitted to be sold in Australia and New Zealand. An extract of Article 5 of the MAA is provided below, explaining how mutual acceptance operates.

#### **ARTICLE 5** ***Mutual Acceptance of Oenological Practices***

1. *The Parties shall accept each other’s laws, regulations and requirements relating to oenological practices and the mechanisms to regulate them.*
2. *The Parties shall permit the importation of wine produced in the territory of another Party in conformity with that other Party’s laws, regulations and requirements relating to oenological practices and the mechanisms to regulate them.*

Australia advised the other members of the WWTG in April 2016 of this Application (A1119) to introduce changes to the Code to permit the use of water to facilitate fermentation of high sugar must. It was emphasised that a minimum sugar content would be defined below which the must could not be further diluted. Members agreed to share their own legislation relating to the use of water at the next meeting of the group, scheduled for October 2016.

### **1.3.4 European Union**

The European Union provisions for adding water during wine manufacture are limited but not fully defined. The Commission Regulation (EC) No 479/2008 in Annex VI (Restrictions) contains the following provision (copied below) for the restriction on adding water (permitted for “specific technical necessity”, but this term is not defined or described). This same

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<sup>1</sup> <http://www.ftb.gov/agreements/us-eu-wine-agreement.pdf>

<sup>2</sup> [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL\\_2006\\_087\\_R\\_0001\\_01&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL_2006_087_R_0001_01&from=EN)

<sup>3</sup> <http://ita.doc.gov/td/ocg/maa.pdf>

sentence is repeated in a later 2013 Commission Regulation (EC) 1308/2013 in Annex VIII Part II (Restrictions).

*All authorised oenological practises shall exclude the addition of water, except where required on account of a specific technical necessity.*

## **1.4 Reasons for accepting Application**

The Application was accepted for assessment because:

- it complied with the procedural requirements under subsection 22(2) of the FSANZ Act
- it related to a matter that warranted the variation of a food regulatory measure.

The current provisions in the Code for adding water during wine production do not cover the case of adding water to dilute high sugar musts to limit the occurrence of “stuck” fermentations. This practice is catered for in other international wine regulations.

## **1.5 Procedure for assessment**

The Application is being assessed under the General Procedure.

# **2 Summary of the assessment**

The Application, which relates only to the addition of water to high sugar musts before fermentation under specific conditions, does not raise any public health and safety matters, so FSANZ has not performed a risk assessment. The issues raised by FSANZ’s consideration of the Application have been concluded as being risk management matters and are addressed in the next section.

## **2.1 Risk management**

The risk management considerations raised by the Application relate to whether FSANZ agrees that there is a food regulatory issue or problem that requires a response and, if so, what is the most appropriate risk management option to address that issue, having regard to the requirements of the FSANZ Act (which are considered below).

### **2.1.1 Regulatory problem**

As discussed in section 1.2 the Application argues that with the increasing impact of climate change there is a greater chance of “stuck” fermentations due to higher sugar content musts. The reasons for harvested grapes having higher sugar content are higher average temperatures during grape development and during the vintage period. Wineries are also noticing an earlier start to vintage but also a shorter vintage period which may cause grapes to be picked later than optimal, due to equipment and logistical (transportation and winery capacity) limitations. This phenomenon is backed by anecdotal sources in the Australian wine industry but also by statistics from the Australian Wine Research Institute (AWRI) helpdesk on enquiries they have received from wineries relating to “stuck” fermentations. There has been an increase in occurrences of stuck fermentations (noting that these figures are only when enquiries are made to the AWRI, and are not a compilation of all “stuck” fermentations that have occurred). The Applicant also communicated with major yeast suppliers to the wine industry who also reported an increase in the number of “stuck” fermentations.

The issue wineries currently have is when they measure high sugar concentrations in their musts they are aware from experience that they may encounter “stuck” fermentations issues

but the current regulations limit the options they can use. That is, there are no provisions in the Code relating to adding water during wine production to dilute high sugar content musts.

The Application further notes that the growing season is expected to get warmer and vintage period is likely to get shorter and hotter due to climate change. This is unlikely to change in the foreseeable future.

### **2.1.2 “Stuck” fermentations**

The literature was searched to understand the issue of “stuck” fermentations, their causes and remedies to prevent (rather than remediate after the event) their occurrence.

The AWRI wrote a brief for the Australian wine industry in March 2013 on the topic of “stuck”, slow sluggish fermentations (AWRI, 2013). This information sheet explained that the wine industry had problems with a lot of “stuck” and slow fermentations as 2013 was one of the earliest and quickest vintages, due to high temperatures and little rain. The grape sugar levels increased rapidly. These conditions were viewed by the AWRI as being the cause of the increased number of “stuck” fermentations. At the time the AWRI could not advise wineries to dilute their high sugar musts with water as such an approach was not legal and compliant with the Code then (or now).

As noted in section 1.3.2 the USA regulations allow wineries to use water to reduce the sugar content of their musts to facilitate fermentation (and limit fermentation problems of “stuck” fermentations). The USA has acknowledged and addressed this practical issue in its regulations.

### **2.1.3 Proposed regulatory solution**

Amendment of the Code is the only option available that can ensure regulatory certainty and permit practices (i.e. addition of water to high sugar musts before fermentation subject to specified limits) that do not pose a health and safety risk but which may be prohibited by current Code provisions.

There are no non-regulatory options that can appropriately address the regulatory problem or ensure regulatory certainty.

It is also noted that the US regulations do permit the addition of water to dilute high sugar extracts to improve fermentation performance, with limitations. The limitations provide some useful precedent for how the Code may be amended, by referring to sugar concentrations expressed in units of Brix.

The Applicant suggested using sugar concentration limits in units of Baumé (Bé), rather than degrees Brix<sup>4</sup> which the US regulations use, since Australian winemakers tend to use Baumé. Both measurements are indirect measurements of sugar concentrations in solution. 1 degree Bé is approximately equivalent to 18 grams sugar/litre (kg) solution, while 1 degree Brix is approximately 10 grams of sugar/litre (kg) solution. Measurements of sugar in Bé units are popular because it gives a very rough approximation of the final alcohol content of the final wine, post fermentation (Wilkes, 2016). The suggestion by the Applicant was that water addition to dilute high sugar musts should not be below 15 Bé (which is 27 Brix); this is a higher level than the US regulation. The US regulation is that grape juice (must) may not be diluted by water below 22 degrees Brix (12.2 Bé).

The Applicant further argued that diluting the sugar content in high sugar musts may take a

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<sup>4</sup> The conversion factor to convert degrees Bé to degrees Brix is approximately 1.8, that is 1 degree Bé = 1.8 degrees Brix. [http://www.cwcoop.com.au/\\_files/d/40040/Baume%20Brix%20Conversion%20Chart.pdf](http://www.cwcoop.com.au/_files/d/40040/Baume%20Brix%20Conversion%20Chart.pdf) (Accessed 7 April 2016)



reasonable percentage of water for extreme cases and there would be minimal water addition allowed for other accepted uses of water as currently allowed (up to 7% for incorporation of food additives and processing aids and other incidental uses, but in conformance to good manufacturing practice for Australian produced wine due to Standard 4.5.1). The request was therefore that the extra provision to use water to dilute high sugar musts to limit fermentation problems be added to the current water provisions.

FSANZ has assessed the request and concluded that the outcome sought is reasonable and realistic. FSANZ has therefore prepared a proposed draft variation to implement this.

### **2.1.3.1 Standard 4.5.1**

Subclause 5(7) of Standard 4.5.1 contains the current provisions for water addition during wine production, as explained in section 1.3.1 above. There is a 7% limit on the total amount of water that can be added for different purposes such as adding aqueous concentrated solutions of food additives and processing aids used during production. Incidental water such as used in the emptying and flushing grapes from the harvesting bins into the crushers and flushing and cleaning pipes and equipment between batches also add to the total water volume inadvertently added during wine production. All wine regulations around the world accept that water will enter into wine production during legitimate technical processes (the “technical necessity” phrase used in European legislation).

What is being sought in this Application is to add to the current provisions a separate provision only to be used when must sugar levels are high, to allow dilutions to a specific minimum sugar content to limit “stuck” fermentations.

Subclause 5(7) will be amended to allow for the use of water to dilute high sugar grape must to facilitate fermentation (limit “stuck” fermentations), but the dilution must not be below 15 degrees Baumé (Bé). The current provisions are unchanged but have been re-written so that all the water provisions are listed together but in a neater manner in the proposed drafting in Attachment A.

### **2.1.3.2 Standard 1.1.2**

The definition of wine in subsection 1.1.2—3(2) contains provision for adding water during wine production (also referenced in a Note in Standard 2.7.4). This provision is not as detailed as that in Standard 4.5.1. Because Standard 1.1.2 is relevant for New Zealand-produced wine and also all imported wine, it is viewed as being inappropriate to require a specific minimum sugar concentration so as not to restrict trade. Therefore the additional new provision is proposed to be quite general and to refer to the addition to facilitate fermentation. The Application suggests adding the further phrase “or when the addition of water is incidental to the winemaking process” to the current provisions to be more consistent with Standard 4.5.1, current international regulations and actual winemaking processes. This suggestion has been incorporated into the proposed drafting.

### **2.1.3.3 Schedule 2 – Units of measurement)**

Degrees Baumé (Bé) is a unit of measurement, so FSANZ is proposing to add it to the table to section S2—2 as a consequence of the proposed amendment to subclause 5(7) in Standard 4.5.1.

## **2.2 Risk communication**

FSANZ has developed a basic communication strategy for this Application.

## **2.2.1 Consultation**

Consultation is a key part of FSANZ's standards development process. The process by which FSANZ considers standard development matters is open, accountable, consultative and transparent. Public submissions are called for to obtain the views of interested parties on the Application and the impacts of the regulatory options. All calls for submissions are notified via the FSANZ Notification Circular, media release, FSANZ's social media tools and Food Standards News.

The Applicant, individuals and organisations that make submissions on this Application will be notified at each stage of the assessment. Subscribers and interested parties are also notified via email about the availability of reports for public comment.

Following consultation, the FSANZ Board will consider the proposed variation taking into account comments received through submissions. If the draft variation to the Code is approved by the FSANZ Board, that decision will be notified to the Australia and New Zealand Ministerial Forum on Food Regulation (Forum). If the decision is not subject to a request for a review, the Applicant and stakeholders, including the public, will be notified of the gazettal of the variation to the Code via email alert and the Circular.

## **2.2.2 World Trade Organization (WTO)**

As members of the World Trade Organization (WTO), Australia and New Zealand are obliged to notify WTO members where proposed mandatory regulatory measures are inconsistent with any existing or imminent international standards and the proposed measure may have a significant effect on trade.

There are not any relevant international standards and amending the Code to permit the addition of water to dilute high sugar musts to aid fermentation in the production of wine, sparkling wine and fortified wine is unlikely to have a significant effect on international trade as this is voluntary and is acceptable practice in many countries to which Australia trades with. Therefore, a notification to the WTO under Australia's and New Zealand's obligations under the WTO Technical Barriers to Trade or Application of Sanitary and Phytosanitary Measures Agreement was not considered necessary.

## **2.3 FSANZ Act assessment requirements**

When assessing this Application and the subsequent development of a food regulatory measure, FSANZ has had regard to the following matters in section 29 of the FSANZ Act:

### **2.3.1 Section 29**

#### **2.3.1.1 Cost benefit analysis**

FSANZ is required to consider the impact of various regulatory and non-regulatory options on all sectors of the community, especially relevant stakeholders.

FSANZ corresponded with the Office of Best Practice Regulation (OBPR) which indicated that the proposed changes are of a minor nature and no further analysis (in the form of a Regulation Impact Statement) is required. The OBPR ID number for this opinion is ID 20924.

The benefits and costs associated with the proposed amendments to the Code have been considered based on regulatory impact principles. The level of analysis is commensurate to the nature of the Application and significance of the impacts.

FSANZ has undertaken a limited qualitative impact analysis.

Two regulatory options have been considered:

- (1) prepare a draft variation to the Code to permit the addition of water to dilute high sugar musts to aid fermentation in the production of wine, sparkling wine and fortified wine.
- (2) reject the Application.

The likely impacts of these options were considered but this is not intended to be an exhaustive, quantitative economic analysis. Rather, the qualitative effects of each option are described below, and are deliberately limited to broad areas such as trade and consumer choice.

### Option 1 – prepare a draft variation to the Code

Sector	Costs or benefits
Consumers	There are no impacts on consumers. There are no public health or safety costs or benefits. See also section 2.3.2.3 below.
Industry	The Australian wine industry will see benefits in having regulatory certainty to be able to use water to dilute high sugar musts to limit fermentation problems such as “stuck” fermentations. The current trend of hotter and shorter vintages has seen a higher level of “stuck” fermentations which are only going to continue due to climate change. The Australian wine companies will be able to compete on an even footing with overseas competitors. The New Zealand wine industry does not believe this Application will have a direct impact on it, but it has indicated general support.
Governments	The AGWA, being the Australian government agency responsible for ensuring compliance of exported wine supports the Application to limit any breaches of the current Code’s water addition provisions.

### Option 2 – reject the Application

Sector	Costs or benefits
Consumers	There are no impacts on consumers. There are no public health or safety costs or benefits.
Industry	The Australian wine industries would not have available to them the best approach to limit “stuck” fermentation problems due to high sugar musts which has, and is expected to increasingly become a greater problem due to climate warming. It puts them at a disadvantage compared to some international competitors. It also leaves companies at a risk of prosecution if they dilute musts in breach of current wine regulations.
Governments	There would be no direct impacts on government agencies.

FSANZ considered that Option 1 to permit the addition of water to dilute high sugar musts to aid fermentation of wine, sparkling wine and fortified wine was the preferred option and has prepared a draft variation.

The direct and indirect benefits that would arise from a food regulatory measure developed or varied as a result of the Application outweigh the costs to the community, Government or industry that would arise from the development or variation of the food regulatory measure.

#### 2.3.1.2 Other measures

There are no other measures (whether available to FSANZ or not) that would be more cost-effective than a food regulatory measure developed or varied as a result of the Application.

#### 2.3.1.3 Any relevant New Zealand standards

Standard 4.5.1 is an Australia only standard, but Standards 1.1.2 and 2.7.4, and Schedule 2 apply to New Zealand produced wine.

#### **2.3.1.4 Any other relevant matters**

Other relevant matters are considered below.

#### **2.3.2 Subsection 18(1)**

FSANZ has also considered the three objectives in subsection 18(1) of the FSANZ Act during the assessment.

##### **2.3.2.1 Protection of public health and safety**

The Application does not raise any issues relating to public health and safety.

##### **2.3.2.2 The provision of adequate information relating to food to enable consumers to make informed choices**

The Application does not raise any issues related to this objective.

##### **2.3.2.3 The prevention of misleading or deceptive conduct**

No issues were identified for this Application relevant to this objective. Wine companies cannot use the proposed new provisions relating to diluting high sugar musts as a means to dilute wine to mislead or deceive consumers. Companies can only dilute the must down to a specific level which still provides for good wine fermentation. The current water provisions are unchanged and are limited to good manufacturing practice for legitimate oenological practices.

#### **2.3.3 Subsection 18(2) considerations**

FSANZ has also had regard to:

- **the need for standards to be based on risk analysis using the best available scientific evidence**

No risk assessment was required for assessing this Application, so there was little need to use the best available scientific evidence for the risk analysis appropriate for this Application. However an assessment was conducted on the issue of “stuck” fermentations and high sugar musts and appropriate measures to limit fermentation problems.

- **the promotion of consistency between domestic and international food standards**

The assessment has considered consistency with comparable international wine regulations as noted in section 1.3 above. Specifically the US has comparable regulations and limits when water may be added to dilute high sugar musts to facilitate fermentation (section 1.3.2) to those of the Application.

- **the desirability of an efficient and internationally competitive food industry**

The assessment has considered the effect hotter and shorter vintage periods are having on producing higher sugar content musts due to the impact of climate change, and the negative impact this is having on wine production processes. These are considered to be having a negative impact on an efficient and internationally competitive wine industry.

- **the promotion of fair trading in food**

No issues relevant to this objective were identified for this Application.

- **any written policy guidelines formulated by the Forum on Food Regulation**

There are no relevant policy guidelines.

### 3 Draft variation

The draft variation to the Code is at Attachment A and is intended to take effect on gazettal.

A draft explanatory statement is at Attachment B. An explanatory statement is required to accompany an instrument if it is lodged on the Federal Register of Legislation.

### 4 References

The Australian Wine Research Institute (AWRI) information sheet titled “Timely reminder about slow sluggish and stuck fermentations”, 27 March 2013, [http://www.awri.com.au/information\\_services/ebulletin/2013/03/27/stuck-fermentations/](http://www.awri.com.au/information_services/ebulletin/2013/03/27/stuck-fermentations/) (Accessed 7 April 2016)

Commission Regulation (EC) No 479/2008 of 29 April 2008, on the common organisation of the market in wine, amending Regulations (EC) No 1493/1999, (EC) No 1782/2003, (EC) No 1290/2005, (EC) No 3/2008 and repealing Regulations (EEC) No 2392/86 and (EC) No 1493/1999, 29 April 2008, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:148:0001:0061:EN:PDF> (Accessed 26 April 2016)

Commission Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013, establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007, 17 December 2013, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1308&from=EN> (Accessed 26 April 2016)

Wilkes, E (2016) Baume to alcohol: It's only an approximation. Aust. N.Z. Grapegrower Winemaker 324(1):59-61.

### Attachments

- A. Draft variation to the *Australia New Zealand Food Standards Code*
- B. Draft Explanatory Statement

## Attachment A – Draft variation to the *Australia New Zealand Food Standards Code*



### Food Standards (Application A1119 – Addition of Water to facilitate Wine Fermentation) Variation

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The Board of Food Standards Australia New Zealand gives notice of the making of this variation under section 92 of the *Food Standards Australia New Zealand Act 1991*. The variation commences on the date specified in clause 3 of this variation.

Dated [To be completed by Standards Management Officer]

Standards Management Officer  
Delegate of the Board of Food Standards Australia New Zealand

**Note:**

This variation will be published in the Commonwealth of Australia Gazette No. FSC XX on XX Month 20XX. This means that this date is the gazettal date for the purposes of clause 3 of the variation.

## 1 Name

This instrument is the *Food Standards (Application A1119 – Addition of Water to facilitate Wine Fermentation) Variation*.

## 2 Variation to Standards in the *Australia New Zealand Food Standards Code*

The Schedule varies Standards in the *Australia New Zealand Food Standards Code*.

## 3 Commencement

The variation commences on the date of gazettal.

### Schedule

**[1] Standard 1.1.2** is varied by omitting subparagraph (b)(iv) in the definition of “wine” in subsection 1.1.2—3(2), substituting

- (iv) water that:
  - (A) is necessary to incorporate any substance or food permitted for use as a food additive or a processing aid; or
  - (B) facilitates fermentation; or
  - (C) is incidental to the winemaking process.

**[2] Standard 2.7.4** is varied by omitting subparagraph (b)(iv) in the definition of “wine” in the Note to section 2.7.4—2, substituting

- (iv) water that:
  - (A) is necessary to incorporate any substance or food permitted for use as a food additive or a processing aid; or
  - (B) facilitates fermentation; or
  - (C) is incidental to the winemaking process.

**[3] Standard 4.5.1** is varied by omitting subclause 5(7), substituting

(7) Wine, sparkling wine and fortified wine must not contain added water other than water:

- (a) necessary to incorporate any substance specified in clause 3 or clause 4; or
- (b) necessary to facilitate fermentation by diluting high sugar grape must; or
- (c) incidental to the winemaking process.

(7A) Wine, sparkling wine or fortified wine must not contain more than 70 mL/L of the following:

- (a) water added to incorporate any substance specified in clause 3 or clause 4;
- (b) water incidental to the winemaking process; or
- (c) any combination of water listed in paragraphs (a) and (b)

(7B) Water added to dilute high sugar grape must to facilitate fermentation must not dilute the must below 15 degrees Bé.

(7C) Subject to subclauses (7A) and (7B), wine, sparkling wine or fortified wine must not contain more added water than is consistent with \*GMP.

**[4] Schedule 2** is varied by inserting into the table to section S2—2 in alphabetical order

Bé	Baumé scale
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## **Attachment B – Draft Explanatory Statement**

### **1. Authority**

Section 13 of the *Food Standards Australia New Zealand Act 1991* (the FSANZ Act) provides that the functions of Food Standards Australia New Zealand (the Authority) include the development of standards and variations of standards for inclusion in the *Australia New Zealand Food Standards Code* (the Code).

Division 1 of Part 3 of the FSANZ Act specifies that the Authority may accept applications for the development or variation of food regulatory measures, including standards. This Division also stipulates the procedure for considering an application for the development or variation of food regulatory measures.

FSANZ accepted Application A1119 which seeks to permit the addition of water to dilute high sugar musts to aid fermentation in the production of wine, sparkling wine and fortified wine. The Authority considered the Application in accordance with Division 1 of Part 3 and has prepared a draft Standard.

### **2. Purpose**

The Authority has prepared variations to Standards 1.1.2, 2.7.4 and 4.5.1 and Schedule 2 to permit the addition of water to dilute high sugar musts to facilitate wine fermentations by limiting fermentation problems such as 'stuck' fermentations due to very high sugar contents in the original grape musts (grape extract).

### **3. Documents incorporated by reference**

The variations to food regulatory measures do not incorporate any documents by reference.

### **4. Consultation**

In accordance with the procedure in Division 1 of Part 3 of the FSANZ Act, the Authority's consideration of Application A1119 will include one round of public consultation following an assessment and the preparation of a draft Standard and associated report.

A Regulation Impact Statement was not required because the proposed variations to Standards 1.1.2, 2.7.4 and 4.5.1 and Schedule 2 are likely to have a minor impact on business and individuals.

### **5. Statement of compatibility with human rights**

This instrument is exempt from the requirements for a statement of compatibility with human rights as it is a non-disallowable instrument under section 94 of the FSANZ Act.

### **6. Variation**

#### ***Item 1***

The definition of wine in subsection 1.1.2—3(2) is amended to be more consistent with the current provisions in Standard 4.5.1 and to allow for the addition of water to dilute high sugar musts to facilitate fermentation. The two extra provisions added to subparagraph (b)(iv) under the wine definition are to allow water to facilitate fermentation, and that is incidental to the winemaking process. The current provision relating to the use of water to incorporate any substance permitted for use as a food additive or a processing aid has been expanded to be more explicit as foods can also be used as processing aids.



## **6.2 Item 2**

The amendment to the definition of wine in the Note to section 2.7.4—2 is a consequential amendment arising from the change to the definition of wine in subsection 1.1.2—3(2).

## **6.3 Item 3**

The current provisions for the use of and addition of water during wine production in subclause 5(7) has been expanded to include the addition of water to dilute high sugar grape must to facilitate fermentation. However the grape must sugar concentration must not be diluted below 15 degrees Baumé (abbreviated as Bé).

## **6.4 Item 4**

The unit of measurement for ‘degrees Baumé’, being ‘Bé’, has been added into the table to section S2—2.