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**[31–16]**

Approval report – Application A1119

Addition of Water to Facilitate Wine fermentation

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Food Standards Australia New Zealand (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.

On 29 June 2016, FSANZ sought submissions on a draft variation and published an associated report. FSANZ received seven submissions along with two late submissions.

FSANZ approved the draft variation on 6 December 2016. The Australia and New Zealand Ministerial Forum on Food Regulation (Forum) was notified of FSANZ's decision on 12 December 2016.

This Report is provided pursuant to paragraph 33(1)(b) of the *Food Standards Australia New Zealand Act 1991* (the FSANZ Act).

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## Executive summary

FSANZ assessed an Application from the Winemakers' Federation of Australia (WFA) which sought 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 “stuck” fermentations, which are slow fermentations that do not proceed smoothly to completion, but require various interventions in the winery to resolve. It is also possible that they may produce sub-standard wines.

The Application stated 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 increase, and likely to continue to increase, the chances of more harvested grapes with higher than optimal sugar contents. It is also claimed such climatic conditions can cause a more compressed vintage period that causes logistical problems in the winery, exacerbating the problems of high sugar grapes.

The Application proposed a method that 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 existed in the Code that allowed for this remedy.

The Code imposes strict conditions on when wineries can add water during wine production. These are detailed in the Australia only Standard 4.5.1 – Wine Production Requirements which provides permission for water to be used to incorporate substances (food additives and processing aids) used in production or water incidental to the winemaking process up to a defined limit. The definition of wine contained in Standard 1.1.2 which applies for the purposes of Standard 2.7.4 – Wine and Wine Product regulates the presence of water due to its use to incorporate food additives and processing aids only. Standard 2.7.4 is a joint standard, applying to New Zealand and imported wine.

Wine regulations in the United States of America (USA) 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 accepted the arguments and justification provided in the Application and noted the proposed provision to use water to dilute high sugar musts to limit “stuck” fermentations is similar to that in the USA regulations.

FSANZ amended Standard 4.5.1 to provide a provision to add water to high sugar grape must to facilitate fermentation. However, a limit has been set so that the dilution must not dilute the grape must below 13.5 degrees Baumé (Bé) which is a measurement of grape sugar content. The Australian wine industry is more familiar with degrees Baumé than degrees Brix which is used in the USA regulations. No amendments were made to Standards 1.1.2 and 2.7.4 due to the lack of technical necessity for New Zealand wine, New Zealand stakeholder opposition and other factors.

# 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 for Australian wine producers, though it was felt this was 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 slow fermentations that do not proceed smoothly to completion, but require various interventions in the winery to resolve. 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 proposed a method that 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, the Code does not expressly allow the addition of water during wine production for this purpose.

## 1.3 The current standards

The Code provisions dealing with water added during wine production are 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.

There are three Standards that are relevant for wine production and they have requirements related to water added during wine production.

### **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.

Clause 1 of Standard 4.5.1 defines the term “wine” for the purposes of that Standard. This definition is different to the definition provided in Standard 1.1.2 (which applies for the purposes of Standard 2.7.4). For the purposes of Standard 4.5.1, “wine” is defined to mean “the product of the complete or partial fermentation of fresh grapes, or a mixture of that product and products derived solely from grapes”. The definition does not contain any express reference to or permission for the presence of added water. The latter is provided by subclause 5(7).

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.*

Incidental water is intended to cover small amounts of water which may be present from production processes such as residual water remaining in tanks and pipes after washing and cleaning and hosing out bins to force the last of the grapes into the crushers, where the water used is the minimum needed to perform the technological purpose (i.e. using good manufacturing practices). Water is also permitted to include the addition of processing aids and food additives added as an aqueous solution.

The subclause does not contain an express permission for water added to dilute high sugar musts to limit the occurrence of “stuck” fermentations.

### **Standard 1.1.2**

The definition of wine is provided in subsection 1.1.2—3(2):

**wine** means:

- (a) a food that is the product of the complete or partial fermentation of fresh grapes, or a mixture of that product and products derived solely from grapes; or
- (b) such a food with any of the following added during production:
  - (i) grape juice and grape juice products;
  - (ii) sugars;
  - (iii) brandy or other spirit;
  - (iv) water that is necessary to incorporate any substance permitted for use as a food additive or a processing aid.

The definition provides for the addition of water to incorporate food additives or processing aids but does not refer to (or ‘permit’ for the purposes of Standard 2.7.4) the presence of other water added during production e.g. added water that is/was *incidental* to *winemaking* or the addition of water to enable fermentation to be in a product being sold as wine.

### **Standard 2.7.4**

Standard 2.7.4 applies to wine and wine product sold in Australia and New Zealand. It does not regulate processing or production but regulates the composition of a final product that is sold.

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

The definition of wine in section 1.1.2—3 of Standard 1.1.2 applies for the purposes of section 2.7.4—3 and the requirement imposed by it. For this reason, the Note to section 2.7.4—2 provides a cross reference to that definition.

## 1.4 International Standards and Agreements

### 1.4.1 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) 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.

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<sup>1</sup> <http://www.ttb.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)

#### **1.4.2 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 to introduce changes to the Code to permit the use of water to facilitate fermentation of high sugar must. It was emphasised by Australia 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.

#### **1.4.3 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 provision below for the restriction on adding water (permitted for "specific technical necessity", but this term is not defined or described). This same 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.*

### **1.5 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 did 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.

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

## **1.6 Procedure for assessment**

The Application was assessed under the General Procedure.

# **2 Summary of the findings**

The Application, which related only to the addition of water to high sugar musts before fermentation under specific conditions, did not raise any public health and safety matters, so FSANZ did not perform a risk assessment.

## **2.1 Summary of issues raised in submissions**

FSANZ sought submissions on a draft variation and associated report for six weeks from 29 June to 10 August 2016. FSANZ received seven submissions along with two late submissions.

The issues raised, and FSANZ's response, in these seven submissions are summarised in Table 1. Where amendments to the draft variations were an outcome of the consideration of the issue it has been noted.



**Table 1: Summary of issues**

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>It is concerned that higher sugar levels due to shorter warmer vintage periods is not the complete picture. Other factors that can cause higher than optimum sugar concentrations (Bé levels) such as reduction and consolidation of processing capacity and a reluctance to blend fruit at different stages of ripeness.</b></p> <p><b>It feels there could be economic implications to its members where wine producers may use the proposed amendment for their economic benefit but at the expense of grape growers.</b></p> <p><b>It is worried that the change as requested may become standard practice so it supports the principle of only allowing dilution to occur above a certain sugar content, though it is not in a position to comment on the specific limit. This helps limit the addition to exception rather than a general rule.</b></p> <p><b>Wine grapes are typically sold by weight so as sugar content increases due to high temperatures which causes moisture loss after optimum ripeness which in turn causes a reduction in the weight of the grape, hence a reduction in the return to the grape grower.</b></p>	<p>Wine Grape Council SA</p>	<p>It is noted that the submission is provided by a grape grower organisation and not wine producers.</p> <p>FSANZ has proposed having a specific sugar concentration limit on the grape must as a way to ensure this proposed adjustment is the exception rather than the norm. The approved draft variation sets a specific limit. It requires that the water added to facilitate fermentation does not dilute the must below 13.5 degrees Bé. FSANZ also notes the evidence from the Applicant, supported by other submitters, that climatic factors outside the control of industry are a cause of higher sugar levels in production.</p> <p>Issues relating to industry processing capacity and decision-making in terms of harvest timing and spread are considered out of scope of the Application.</p> <p>FSANZ notes the comment on the possible impact on payments to grape growers if higher sugar grapes can be sold, and also the comment that despite this the submitter supports the application. This has been factored in the cost benefit analysis.</p>

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>It is understood that yield loss due to heat events is a significant problem for both grape growers and wine producers where everyone suffers loss; but the grape grower suffers the greatest loss to income.</b></p> <p><b>There is concern that wine producers have a ready remedy to treat high sugar content musts which could become routine practice rather than working diligently and in good faith to ensure grapes are taken in good time, as specified in many grape supply contracts.</b></p>	<p>Wine Grape Growers Australia</p>	<p>Noted, see response above.</p>
<p><b>The ability to treat must with water should be treated as a last resort and should not be viewed as an alternative to harvesting fruit at the optimum condition. Another way to help alleviate the issue is to invest in processing capacity. It agrees that a minimum sugar content (proposed at 15 Bé in the Call for Submissions, now reduced to 13.5 Bé) is important.</b></p>	<p>Wine Grape Growers Australia</p>	<p>Noted, see response above.</p>
<p><b>The term “high sugar grape must” should be defined to make clear that it is referring to grape juice and to clearly distinguish it from the use of the word “must” as a verb in other provisions to denote a compliance obligation.</b></p>	<p>New South Wales Food Authority</p>	<p>Noted. FSANZ does not consider that a definition is required as the term “must” is a well understood term in the grape and wine industry and will be given its ordinary meaning. The Macquarie Dictionary, for example defines must as “the unfermented juice as pressed from the grape or other fruit”.</p> <p>FSANZ does not consider that a definition of “high sugar” must is needed because the new provision in subclause (7C) of 4.5.1 indicates that only must above 13.5 degrees Bé would meet this description.</p>

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>Clarification sought on whether the maximum threshold in Standard 4.5.1 for added water (70ml/L) will be limited to water added for the purpose of adding processing aids and additives to wine and for purposes incidental to the winemaking process. Is the addition of water to facilitate fermentation limited to high sugar grape must (grape juice before yeast is added) and not to wine (i.e. following yeast addition)?</b></p>	<p>New South Wales Food Authority</p>	<p>Subclause 5(7) of Standard 4.5.1 currently provides that wine may contain water added for the purpose of adding processing aids and additives to wine or for purposes incidental to the winemaking process (see section 1.3 for a discussion of incidental water). Subclause 5(7) also imposes a limit of 70ml/L in relation to that water. It also imposes a good manufacturing practice requirement in relation to that water. The draft variation maintains that maximum limit and that requirement for those two categories of water – see subclause 5(7B) in the draft variation. The 70ml/L limit will not apply to water added to facilitate fermentation. That water is added to high sugar grape must and not to the wine. Water added to facilitate fermentation will be subject to the requirement that that water not dilute the must below 13.5 Bé due to subclause 5(7C). It will also be subject to a good manufacturing practice requirement – see subclause 5(7D) in the draft variation.</p>

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>It supports the Application as there have been difficult climatic conditions which resulted in high sugar grapes which led to stuck fermentations and they would have appreciated the ability to reduce the sugar content of the must at the time.</b></p> <p><b>However, it believes the minimum level of sugar concentration in the grape must of 15 Bé is too high as from their experience such high grape sugar musts can still lead to stuck fermentations.</b></p> <p><b>The US regulation allows for a reduction in sugar concentration to 22°Brix which is equivalent to 12.2 Bé.</b></p> <p><b>Therefore, it suggests that the sugar concentration limit in the grape must be reduced from 15 Bé to 13.5 Bé.</b></p>	<p>Pernod Ricard Winemakers</p>	<p>Agreed.</p> <p>The approved draft variation imposes a limit of 13.5 Bé. This takes account of the submissions received on the need for a lower limit than that proposed at Call for Submissions (see section 2.2.4.3).</p> <p>The Applicant also requested a reduction to 13.5 Bé as proposed by the submitter who is one of its members. The Applicant considered that a numerical limit (of 13.5 Bé) should be specified to ensure clarity, consistency with international practice (in particular the US regulation) and to avoid any perception that water addition is unlimited and can be normal practice.</p> <p>The Applicant indicated that a principal reason that fermentations do not proceed to completion (i.e. become a stuck fermentation) is the detrimental effect the accumulation of alcohol (from the wine fermentation) has on yeast activity. It is a winery rule of thumb that 15 Bé in the grape must converts to 15% alcohol after fermentation. 15% alcohol has commonly been thought as the point where fermentation problems can start to manifest themselves. However, there are additional reasons why this is an underestimate:</p> <ul style="list-style-type: none"> <li>– Commercial yeast varieties have been selected for fermentation efficiency and the Baume to alcohol rule of thumb conversion can underestimate total alcohol by at least 0.5%<sup>4</sup>.</li> <li>– The conversion from the Baume scale to g/L of available sugar is not linear and at high sugar concentrations such as 15 Bé can vary by as much as 4%.</li> <li>– As well in red wine, some sugar is bound in other grape components in the grape must and so does not contribute to the sugar concentration reading.</li> <li>–</li> </ul>

<sup>4</sup> Varela C, Kutyna D, Henschke PA, Chambers PJ, Herderich MJ, Pretorius IS. 2008. Taking control of alcohol. Aust. N. Z. Wine Ind. J. 23:41–43

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>In addition to imposing a 13.5 Bé limit, the draft variation should also require that the addition of water to dilute high sugar grape must to facilitate fermentation shall not reduce the must by more than 2 Bé. This additional measure is required to prevent a downgrade of final wine quality.</b></p>	<p>Pernod Ricard Winemakers</p>	<p>FSANZ does not propose to impose this additional measure as it may impose unnecessary restrictions and result in a failure to address adequately the problem of stuck fermentations.</p>
<p><b>Believes the proposed practice should be compliant with all export markets' regulations and recommends that other export market regulations be considered to those noted in the report. It is concerned that some export markets will not accept the proposed practice.</b></p>	<p>Pernod Ricard Winemakers</p>	<p>Noted. FSANZ has had due regard to international standards. The measures contained in the draft variation are deregulatory and voluntary. The draft variation does not mandate that water be added to facilitate fermentation or that wine contain such water. The addition of water to wine for this purpose remains a choice for individual producers. They are also responsible for ensuring that their product complies with the requirements of those countries they export to. Furthermore, the WWTG MAA requires that WWTG member countries permit the importation of wine which are produced in accordance with domestic requirements.</p>
<p><b>Water addition to high sugar grape musts may result in lower dry extracts concentrations that can be important considerations for some markets such as China. It understands that there have been occasions where Australian wine that did not meet this requirement has been rejected.</b></p>	<p>Pernod Ricard Winemakers</p>	<p>Noted. However, see response above.</p>
<p><b>The "Agreement between Australia and the European Community on Trade in Wine" may need to be updated.</b></p>	<p>Pernod Ricard Winemakers</p>	<p>The Department of Agriculture and Water Resources is responsible for the "Agreement between Australia and the European Community on Trade in Wine", along with the Australian wine industry represented by the Applicant. FSANZ understands that the draft variation would not require an update to the Agreement.</p>

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>Fine for Australian wine industry, but there is no need for New Zealand wine industry as New Zealand wine musts do not get above 15 Bé. The suggestion is to stay only with amendments for the Australian wine industry, i.e. Standard 4.5.1.</b></p>	<p>Ministry for Primary Industries (NZ), New Zealand winegrowers</p>	<p>FSANZ notes that the technological reason for approving this variation to prevent 'stuck' fermentations of high sugar musts in Australia due to climatic effects is not applicable in New Zealand. As such, there is no need to amend Standard 1.1.2's definition of wine, as it applies in New Zealand, to include a reference to water added to facilitate fermentation.</p> <p>The proposed drafting, revised after the Call for Submissions, removes the provisions from the joint standard for the reasons outlined in section 2.2.4.2.</p>
<p><b>If the amendments are to also apply to New Zealand wine then they need to be consistent. That is, the amendments to Standard 2.7.4 should be consistent with those being made to Standard 4.5.1. In particular, it is important that the requirement that water added to facilitate fermentation not dilute the high sugar grape must below 13.5 Bé also apply to New Zealand wines.</b></p>	<p>Ministry for Primary Industries (NZ)</p> <p>New Zealand Winegrowers</p>	<p>FSANZ notes MPI and the NZ Winegrowers' concern that the absence of a limit in Standard 2.7.4 is problematic if there is a permission for the addition of water to aid fermentation in the joint standard. Limits were not applied because Standards 2.7.4 and 1.1.2 apply also to imported wine, not just New Zealand produced wine. It was considered difficult to impose restrictions on imported wines because these may be subject to local regulations relating to practices relevant in different regions.</p> <p>As noted in section 2.2.4.2 FSANZ has revised its approach after receiving submissions to this Application to remove permissions from the Standards 1.1.2 and 2.7.4 so no further action is required</p>
<p><b>The amendments to Standards 1.1.2 and 2.7.4 should make it clear that that the addition of water is to dilute high sugar grape must, like the statement in Standard 4.5.1.</b></p>	<p>Ministry for Primary Industries (NZ)</p> <p>New Zealand Winegrowers</p>	<p>Noted. However this is no longer necessary – see above.</p>

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>Questions why the definition for wine in Standard 1.1.2 (which Standard 2.7.4 relies on) needs to refer to the presence of water in the wine that is “incidental to the winemaking process”.</b></p> <p><b>Concerned that:</b></p> <ul style="list-style-type: none"> <li>- this reference isn’t required as water is a permitted processing aid</li> <li>- the meaning of incidental is unclear</li> <li>- there is no limit on how much water can be added as incidental, (in contrast to the Australia only Standard 4.5.1 - which sets a maximum limit 7% in the product being sold).</li> </ul>	<p>Ministry for Primary Industries (NZ)</p>	<p>FSANZ amended the drafting to remove the references to incidental water from the amendments to Standard 1.1.2 and 2.7.4. Therefore, this provision remains as an Australian only standard, in Standard 4.5.1.</p> <p>FSANZ also notes that the reference to the use of water as a processing aid is not of direct relevance to this Application. Under Standard 4.5.1, water may be used to incorporate a processing aid (and food additive) but is not acting as a processing aid itself. Water incidental to the winemaking process (as discussed in section 1.3) is not performing a processing aid function.</p> <p>The ‘wine’ definition’s reference to “incidental to the winemaking process” is well understood and its use is appropriate. This phrase has been used in Standard 4.5.1 for some time without causing any apparent issues for industry or regulators. It is required to cover the unintentional but unavoidable addition of water during all wine making processes (such as water remaining in tanks and pipes after washing and cleaning and hosing out bins to force the last of the grapes into the crushers).</p> <p>Standard 2.7.4 does not currently impose a maximum limit on the amount of added water that may be present in product being sold as wine. Since reference to incidental water has now been removed from the definition of wine, no limit on the level of permitted incidental water is required.</p> <p>A percentage limit on added water or consequential changes to Standard 2.7.4 (which would also apply to imported wine) was never suggested for Standard 2.7.4 when the figure of 7% was added to Standard 4.5.1 via an earlier Application from the current Applicant.</p>
<p><b>Why does the definition of wine for the purposes of Standard 2.7.4 need to refer to the presence of incidental water? Code provisions for other commodities (such as milk, fruit juices, beverages etc) do not make any provision for the presence of such water in the final product. Why is wine treated as a special case?</b></p>	<p>Ministry for Primary Industries (NZ)</p>	<p>The same issue may apply for some other beverages (such as milk and juices). Certainly some juice products and beverages can be adjusted with water to meet product specifications. However, wine and wineries are viewed differently. Wine producers are not permitted to adjust the alcohol content of the final wine. The alcohol content of the wine is that at the end of fermentation and so will differ depending on different factors such as the vintage, the quality of the grapes and the fermentation.</p>

Issue	Raised by	FSANZ response (including any amendments to drafting)
<p><b>Concern that amending the Code to permit the addition of water to wine to facilitate fermentation could be viewed internationally as sanctioning what they call “a questionable winemaking practice”.</b></p>	<p>New Zealand Winegrowers</p>	<p>FSANZ notes the concern raised. We also note international standards, such as those in the United States and Europe, have comparable regulations or permissions for added water. Nevertheless, in view of the lack of technical necessity and the submissions received from New Zealand stakeholders FSANZ has amended the draft variation following the Call For Submissions, to retain reference to this permission only in the Australian standard.</p>
<p><b>Potential to damage the reputation of New Zealand wine.</b></p>	<p>New Zealand Winegrowers</p>	<p>Noted. However, FSANZ does not agree that the amendments themselves have such a potential. For the reasons outlined in its responses above and elsewhere in this report, FSANZ considers the draft variation, as amended following the Call For Submissions, to be appropriate. FSANZ is satisfied that wine producers cannot exploit the new provisions relating to diluting high sugar musts as a means to dilute wine to mislead or deceive consumers. Producers 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. As also explained, the measures contained in the draft variation are deregulatory and voluntary. No evidence has been presented to FSANZ that substantiates such claims. Nevertheless, for the reasons explained in section 2.2.4.2 FSANZ has amended the permission to make it Australian only.</p>



## **2.2 Risk management**

The issues raised by FSANZ's consideration of the Application were concluded to be risk management matters. Such matters related to whether FSANZ agreed that there was a food regulatory issue or problem that required a response and, if so, what was the most appropriate risk management option to address that issue. Such considerations had to also have regard to the requirements of the FSANZ Act (which were considered below in section 5).

### **2.2.1 Regulatory problem**

The regulatory problem, as stated by the Application, is that the Code limits the ability of the Australian wine industry to respond to the increasing problem of "stuck" fermentations due to higher sugar content musts. That is, the Code does not expressly allow the addition of water during wine production to address this issue. 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 was backed by anecdotal sources in the Australian wine industry, and also by statistics from the Australian Wine Research Institute (AWRI) helpdesk on enquiries they had received from wineries relating to "stuck" fermentations. There has been an increase in occurrences of "stuck" fermentations (noting that these figures were only when enquiries are made to the AWRI, and are not a compilation of all "stuck" fermentations that had 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 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.

### **2.2.2 "Stuck" fermentations**

In addition to relying on information provided by the Applicant and submissions, a literature review was conducted on 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 they considered such an approach was not compliant with the Code.

As noted in section 1.4.1 above, the USA regulations expressly 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.

### **2.2.3 Requirement for additional provision for added water**

Subclause 5(7) of Standard 4.5.1 contained the current provisions for water addition during wine production, as explained in section 1.3 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).

This Application sought 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.

The Applicant argued that diluting the sugar content in high sugar musts may take a reasonable percentage of water for extreme cases and therefore, unless an additional permission was provided, 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).

### **2.2.4 Proposed regulatory solution**

Amendment of the Code was the only option available that could ensure regulatory certainty, and permit practices (i.e. addition of water to high sugar musts before fermentation subject to specified limits) which may be prohibited by current Code provisions.

There were no non-regulatory options that could appropriately address the regulatory problem or ensure regulatory certainty.

FSANZ assessed the request and concluded that the outcome sought is reasonable and realistic. FSANZ therefore considered the following factors in approving this request:

- Which standards should be amended, specifically whether this should be an Australian only or a joint Standard
- What limits should be imposed on sugar content
- Any consequential amendments.

#### **2.2.4.1 Standard 4.5.1**

Subclause 5(7) has been 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 produce the must sugar concentration below 13.5 degrees Baumé (Bé) (refer to section 2.2.4.3). The other requirements imposed by subclause 5(7) remain unchanged. However, they have been rearranged to improve clarity.

#### **2.2.4.2 Standard 1.1.2**

The definition of wine in subsection 1.1.2—3(2) provides for the presence in the wine of specific categories of water added during wine production. That definition applies for the purposes of Standard 2.7.4 which among other things, requires that a product sold as wine must be ‘wine’ as defined by subsection 1.1.2—3(2). For this reason, the definition in subsection 1.1.2—3(2) is referenced in a Note in Standard 2.7.4.

The definition of wine in subsection 1.1.2—3(2) is not as detailed as the definition of wine provided in Standard 4.5.1 for the purposes of that Standard.

At the Call for Submissions, it was considered appropriate to amend the definition of wine in Standard 1.1.2 to make it more consistent with Standard 4.5.1. Therefore, both the addition of water to limit the occurrence of “stuck” fermentations and the addition due to incidental use were incorporated into the definition and consequently into the note to Standard 2.7.4. These changes would apply to New Zealand and imported wines. However, submitter comments from New Zealand stakeholders did not agree with this approach. Specifically, they addressed the lack of technological need in New Zealand (due to different climate conditions) and also to the possible damage to the reputation of New Zealand wine due to the perception that water was being inappropriately added.

FSANZ therefore reconsidered the necessity of amending Standards 1.1.2 and 2.7.4. It noted that Standard 2.7.4 was not amended under Application A573 which resulted in the incorporation of the permission for incidental water in Australian wine (in Standard 4.5.1) and that the Applicant had not sought an amendment to the joint Standard to include this provision. On the grounds of lack of technical necessity, New Zealand stakeholder concerns, consideration of international regulations where imported wines are covered by their own oenological regulations, and internal consistency in the Code, FSANZ amended the variation as consulted on at the Call for Submissions to limit the amendments to Standard 4.5.1 only.

#### **2.2.4.3 Limits for permission to dilute high sugar musts**

The USA regulations 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>5</sup> which the USA 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 13.5 Bé (which is approximately 24 Brix); this is a higher level than the USA regulation. The USA regulation is that grape juice (must) may not be diluted by water below 22 degrees Brix (12.2 Bé).

The original draft variations at the Call for Submissions had the must sugar content limit of 15 Bé. However, as noted in the summary of submissions in section 2.1, some Australian wineries commented that 15 Bé was too high as fermentation problems can still occur at that sugar content. The Applicant investigated this point with its members and subsequently supported a revision of the limit down to 13.5 Bé, with justification for the change provided. Additionally, a lower limit would accommodate measurement variation around this level due to underestimation of high sugar concentrations (up to 4%) and the presence of bound sugar in other grape components in the grape must which does not contribute to the sugar concentration reading. This change has been included in the approved draft variation.

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<sup>5</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> (Accessed 7 April 2016)

#### **2.2.4.4 Schedule 2 – Units of measurement**

Section 1.1.1—7 and Schedule 2 apply to the units of measurement used in the Code.

Degrees Baumé (Bé) is a unit of measurement. The approved draft variation therefore includes a reference to it in the table to section S2—2 as a consequence of the amendment made to subclause 5(7) in Standard 4.5.1.

#### **2.2.5 Consideration of costs and benefits**

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

Notwithstanding the above exemption, FSANZ has considered the likely costs and benefits associated with this Application. Permitting the addition of water to dilute high sugar musts to aid fermentation of wine, sparkling wine and fortified wine may have the following costs and benefit to various stakeholders:

##### ***Industry – wine producers:***

- Will enable fermentations which are likely to become stuck due to their high sugar content to proceed to completion without further technical intervention leading to reduced costs
- May avoid production of lower quality wines
- Will permit harvesting and consequent production over a longer period i.e. increase flexibility for the wine processing industry
- Will reduce cost especially for small producers who currently find it logistically difficult and very expensive to source low sugar grapes to reduce the sugar content pre-fermentation

##### ***Industry – grape growers:***

- Will enable sale of higher sugar grapes due to ability of wine makers to use these without current problems of stuck fermentations
- Potential for the increased acceptability of higher sugar grapes (which are of lower weight and increased disease susceptibility) could result in decreased return for grape growers. However, it is not clear if this is a possibility.
- Overall, growers see the approval as a net benefit if only applied by wine manufacturers when exceptional circumstances warrant it.

##### ***Government costs:***

- Implementation and enforcement costs of changed legislation – no additional cost. (It is not possible to test for presence of water due to addition to aid for fermentation.)

##### ***Consumers:***

- It is expected that this may increase the quality of wines due to the ability to complete fermentation without other technical interventions
- Impacts on the costs of wines cannot be estimated but given that production costs are being pushed down some consumer surplus would be expected.

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

Therefore, the preferred option was to prepare a 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.

## **2.2.6 Risk management conclusions**

For the reasons outlined above, FSANZ decided that the best risk management response to the identified regulatory problem was to amend the Code. That is, to provide an express permission for the presence in wine of water added to dilute high sugar musts to limit the occurrence of “stuck” fermentations.

FSANZ therefore approved a draft variation that amends subclause 5(7) of Standard 4.5.1 to include in those provisions references to water added for this specific purpose.

However, FSANZ did not amend the definition of wine in Standard 1.1.2 to include either a reference to the presence of water incidental to the winemaking process or due to addition of water to facilitate fermentation of high sugar musts.

The amendment to Standard 4.5.1 includes a limit on the amount of water that can be added to dilute high sugar musts in order to facilitate fermentation. Subclause 5(7C) in the draft approved variation provides that water added to dilute the must cannot dilute the must below 13.5 degrees Baumé.

## **3 Decision**

The draft variation as proposed following assessment was amended to only include changes to Standard 4.5.1. It removed the changes to the definition in Standards 1.1.2 and 2.7.4 which were included in the Call for Submissions. It is at Attachment A. The variation takes effect on gazettal.

The related 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.

The draft variation on which submissions were sought is at Attachment C.

## **4 Risk communication**

### **4.1 Consultation**

Consultation is a key part of FSANZ’s standards development process. FSANZ acknowledges the time taken by individuals and organisations to make submissions on this Application. Every submission on the Application was considered by the FSANZ Board. All comments are valued and contribute to the rigour of our assessment.

FSANZ developed and applied a basic communication strategy to this Application. The call for submissions was notified via the Food Standards Notification Circular, media release, FSANZ’s social media tools and Food Standards News.

The process by which FSANZ considers standard development matters is open, accountable, consultative and transparent. Public submissions were called to obtain the views of interested parties on issues raised by the Application and the impacts of regulatory options.

The FSANZ Board considered the draft variation taking into account public comments received from the call for submissions.

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

The FSANZ Board's decision has been notified to the Australia and New Zealand Ministerial Forum on Food Regulation. 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 the Notification Circular and on the FSANZ website.

Due to the issues raised by submitters and subsequent changes made to address their comments to the Call for Submissions, targeted consultations were held with the Applicant and with the Ministry for Primary Industries before final preparation of this Approval Report.

## **5 FSANZ Act assessment requirements**

### **5.1 Section 29**

#### **5.1.1 Consideration of costs and benefits**

As explained in section 2.2.5, FSANZ conducted a cost benefit analysis which concluded that the benefits that would arise from the proposed food regulatory measure will outweigh the costs to the community, Government or industry that may arise from that measure.

#### **5.1.2 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.

#### **5.1.3 Any relevant New Zealand standards**

Standard 4.5.1 is an Australia only standard. Whilst New Zealand has a Wine Act, this does not address water added to wine.

#### **5.1.4 Any other relevant matters**

Other relevant matters are considered below.

### **5.2. Subsection 18(1)**

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

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

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

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

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

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

Wine companies cannot use the 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.

## **5.3 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 to assess this Application. However, a literature review was undertaken in relation to 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 considered consistency with comparable international wine regulations (section 1.4). Specifically, the USA has comparable regulations and limits when water may be added to dilute high sugar musts to facilitate fermentation to those of the Application and related provisions exist in European regulations. Furthermore, the provision for mutual acceptance of other countries’ regulations exist under the MAA (see Section 1.4.2).

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

The assessment 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 were 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.

## **6 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. Approved draft variation to the *Australia New Zealand Food Standards Code*
- B. Explanatory Statement
- C. Draft variation to the *Australia New Zealand Food Standards Code* (call for submissions)



## **Attachment A – Approved 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 4.5.1** is varied by omitting subclause 5(7), substituting

- (7) Wine, sparkling wine and fortified wine may contain added water that is:
  - (a) necessary to incorporate any substance specified in clause 3 or clause 4; or
  - (b) necessary to facilitate fermentation; or
  - (c) incidental to the winemaking process.
- (7A) Wine, sparkling wine and fortified wine must not contain added water other than added water permitted by subclause 7.
- (7B) 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)
- (7C) Water may only be added to wine, sparkling wine and fortified wine to facilitate fermentation if the water is added to dilute the high sugar grape must prior to fermentation and does not dilute the must below 13.5 degrees Bé.
- (7D) Subject to subclauses (7A) (7B) and (7C), wine, sparkling wine or fortified wine must not contain more added water than is consistent with \*GMP.

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

Bé

Baumé scale

## **Attachment B – 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 sought a variation 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 variation.

Following consideration by the Australia and New Zealand Ministerial Forum on Food Regulation, section 92 of the FSANZ Act stipulates that the Authority must publish a notice about the standard or draft variation of a standard.

Section 94 of the FSANZ Act specifies that a standard, or a variation of a standard, in relation to which a notice is published under section 92 is a legislative instrument, but is not subject to parliamentary disallowance or sunseting under the *Legislation Act 2003*.

### **2. Purpose**

The Authority has approved variations to Standard 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 included one round of public consultation following an assessment and the preparation of a draft variation and associated report. Submissions were called for on 29 June 2016 for a six-week consultation period.

A Regulation Impact Statement was not required because the proposed variations to Standard 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]***

Item [1] amends Standard 4.5.1. It omits and replaces subclause 5(7) with five new subsections.

New subclause 5(7) permits wine, sparkling wine and fortified wine to contain water: necessary to incorporate any substance specified in clause 3 or clause 4 of Standard 4.5.1; necessary to facilitate fermentation; or incidental to the winemaking process.

New subclause 5(7A) provides that wine, sparkling wine and fortified wine must not contain other types of added water.

New subclause 5(7B) provides that the total, combined amount of the following categories of water in wine, sparkling wine and fortified wine must not exceed 70mL/L: water added to incorporate any substance specified in clause 3 or clause 4 of Standard 4.5.1; and water incidental to the winemaking process.

New subclause 5(7C) provides an express permission for the addition of water to wine, sparkling wine and fortified wine to facilitate fermentation. The subclause provides that: the water may only be added to dilute high sugar grape must, the water must be added prior to fermentation; and the addition of that water must not dilute the grape must sugar concentration below 13.5 degrees Baumé (abbreviated as Bé)

New subclause 5(7D) provides that, subject to subclauses 5(7A), 5(7B) and 5(7C), the amount of added water in wine, sparkling wine and fortified wine must be consistent with good manufacturing practice. The term 'good manufacturing practice' is defined in section 1.1.2—2(3) of the Code.

### ***Item [2]***

Item [2] amends Schedule 2. It adds the unit of measurement for 'degrees Baumé', being 'Bé', to the table to section S2—2.

## Attachment C – Draft variation to the *Australia New Zealand Food Standards Code* (call for submissions)



### 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