



# Wine Standards Management Plan

Code of Practice Fruit Wine, Cider, Mead

Version 2 June 2011



Ministry of Agriculture and Forestry  
Te Manatū Ahuwhenua, Ngāherehere



## Disclaimer

Every effort has been made to ensure the information in this report is accurate.

MAF does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.

Requests for further copies should be directed to:

Manager, Food Standards  
New Zealand Standards Group  
Standards Directorate  
MAF  
P O Box 2526  
WELLINGTON

Telephone: 0800 00 83 33  
Facsimile: 04-894 2634

ISBN 978-0-478-38436-9 (online)

This publication is also available on the [MAF website](#)

© **Crown Copyright - Ministry of Agriculture and Forestry**



# Prelims

Version 2  
June 2011

<b>Contents</b>	<b>Page</b>
<b>Disclaimer</b>	<b>1</b>
<b>Prelims</b>	<b>3</b>
<b>1 Introduction</b>	<b>5</b>
1.1 PURPOSE AND SCOPE	5
1.2 APPLICATION	5
1.3 APPENDICES	5
1.4 OTHER BUSINESSES OPERATING INSIDE THE WINERY	5
<b>2 Glossary</b>	<b>6</b>
<b>3 Document and Record Keeping Requirements</b>	<b>7</b>
<b>4 Receipt of Commodities</b>	<b>8</b>
4.1 RECEIPT OF COMMODITIES	8
4.2 CONTAMINATION	8
4.3 RECORD KEEPING	8
<b>5 Chemicals and Winemaking Inputs</b>	<b>9</b>
5.1 INCOMING GOODS	9
5.2 IDENTIFICATION AND STORAGE OF GOODS	9
5.3 USE OF NON-FOOD CHEMICALS	10
5.4 WINEMAKING ADDITIONS	10
5.5 CONTAMINATION	10
<b>6 Water</b>	<b>11</b>
6.1 WATER CRITERIA	11
6.2 RECORD KEEPING	11
<b>7 Winemaking Equipment</b>	<b>12</b>
<b>8 Cleaning and Sanitation</b>	<b>13</b>
8.1 WASTE	13
8.2 PESTS	13
<b>9 Dealing with Contaminated Wine</b>	<b>14</b>
<b>10 Bottling / Packaging</b>	<b>15</b>
10.1 PACKAGING EQUIPMENT AND PREMISES	15
10.2 BREAKAGES ON THE BOTTLING LINE	15
10.3 RECORD KEEPING	15

---

<b>11</b>	<b>Labelling</b>	<b>16</b>
11.1	LABEL INFORMATION	16
11.2	RECORD KEEPING	16
<b>12</b>	<b>Storage and Dispatch</b>	<b>17</b>
12.1	IDENTIFICATION	17
12.2	STORAGE OFFSITE	17
12.3	BULK WINE AND PACKAGED, UNLABELLED WINE	17
12.4	RECORD KEEPING	17
<b>13</b>	<b>Staff and Visitors</b>	<b>18</b>
13.1	TRAINING	18
13.2	HEALTH AND HYGIENE	18
<b>14</b>	<b>Recalls</b>	<b>19</b>
14.1	RECALL PROCEDURE	19
14.2	REPROCESSING RECALLED WINE	19
14.3	RECORD KEEPING	19
	<b>Appendix 1: Receival, Winemaking and Blending Records</b>	<b>20</b>
	Receival Record	20
	Winemaking Record	21
	Blending Record	22
	<b>Appendix 2: Permitted Winemaking Additions</b>	<b>23</b>
	<b>Appendix 3: List of Chemicals Stored in the Winery (Food &amp; Non-Food)</b>	<b>25</b>
	Part 1: Food Chemicals	25
	Part 2: Non-Food Chemicals	26
	<b>Appendix 4: Wine Standards Management Plan Pre-Season Checklist</b>	<b>27</b>
	<b>Appendix 5: Model Standard Operating Practice: Bottling Line Breakage</b>	<b>29</b>
	<b>Appendix 6: Labelling Requirements</b>	<b>31</b>
	<b>Appendix 7: Wine Standards Management Plan: Model Recall Procedure</b>	<b>32</b>

# 1 Introduction

Version 2

June 2011

## 1.1 PURPOSE AND SCOPE

This Code of Practice is designed to help winemakers meet their obligations under the Wine Act 2003, particularly the requirement for a Wine Standards Management Plan (WSMP).

This Code of Practice provides guidance on processing procedures and Good Winemaking Practice to aid compliance with the legal requirements for all fruit wine, cider and mead produced, blended, finished or bottled in New Zealand. Winemakers that undertake winemaking operations that are not covered by this document will need to develop and document additional procedures in their wine standards management plan.

It is not mandatory to use this Code of Practice, but if you choose to follow it, it will form part of your WSMP. If you choose not to follow it, you will need to provide your own procedures and documentation to meet WSMP requirements.

Additional guidance notes can be found in text boxes. Guidance notes provide additional or useful information and recommendations. Guidance notes are not mandatory.

## 1.2 APPLICATION

This Code of Practice applies to operators of businesses involved in making fruit wine, cider and mead including those making or bottling wine under contract.

## 1.3 APPENDICES

The appendices contain reference documents, recordkeeping forms and a pre-vintage checklist to assist winemakers with WSMP compliance. For example, there is information on the Food Standards Code, a model recall procedure, and a standard operating procedure for bottling line breakage.

The checklist and recordkeeping forms are designed to assist with WSMP compliance by providing an easy-to-use list of tasks that need to be undertaken and records that need to be kept. These checklists and forms are more suited to small wineries with relatively simple operations rather than large, complex wineries that employ a number of staff.

## 1.4 OTHER BUSINESSES OPERATING INSIDE THE WINERY

If a person other than the operator/winemaker uses any area inside the winery for any other business activity, the WSMP must include a procedure that ensures that this activity does not introduce hazards to wine.

## 2 Glossary

Version 2

June 2011

**Commodities** means any plant material or honey used to make wine.

**Contamination** means the introduction of a hazard that results in, or has the potential to result in, the production of wine that is, or could be, harmful to human health and includes:

- chemicals such as oil, machine grease, hydraulic fluid, cleaning fluid and refrigerant;
- foreign objects such as glass fragments.

**Food Standards Code** means the [Australia New Zealand Food Standards Code](#).

**Labelling** refers to the legal standards, contents and requirements for wine labels rather than the affixing of a wine label.

**Verifier** means a person or agency recognised by MAF and chosen by a WSMP operator by way of an agreement to verify compliance with Wine Act requirements.

**Wine** includes fruit wine, vegetable wine, cider, mead, perry, fortified wines and wine-based liqueurs.

**Winemaking equipment** means any equipment that comes into contact with commodities, wine and other inputs during the winemaking process. This includes pump lines, hoses, hoppers, tanks, barrels, fermentation vessels, pumps, valves, filters.

**Winery** means the premises or place where wine is made and includes outdoor areas used for activities such as storage or fermentation.

### 3 Document and Record Keeping Requirements

Version 2

June 2011

- Document and maintain records for wine and winemaking inputs that enable:
  - individual wines to be separately and clearly identified;
  - all winemaking inputs, including commodities, to be identified and traced back to the suppliers of those inputs and tracked forward to the wines they were used in;
  - all wine to be tracked to the next person in the supply chain; and
  - compliance with applicable requirements under the New Zealand (Australia New Zealand Food Standards Code) Food Standards 2002 to be demonstrated.
- All documents and records that form part of the WSMP must be legible, accurate, and date or version marked.
- Winemakers that utilise contract winemaking, packaging and/or labelling services should ensure that the records described in this Code of Practice are maintained by those contractors.

<p>Guidance Note: For winemakers that utilise contractors, best practice is to use the contractor's WSMP identification number. This links all wine to the WSMP(s) it was made and/or bottled under.</p>
--

- Ensure that documents and records are:
  - accessible to your verifier or a person authorised by MAF;
  - retained for a period of at least 7 years; and
  - retrievable within 2 working days or other period as determined by your verifier or MAF.

## 4 Receipt of Commodities

Version 2

June 2011

### 4.1 RECEIPT OF COMMODITIES

- Check that the commodities received are suitable for making into wine.

Guidance Note: Suitability of commodities can be confirmed by checking supplier spray diaries or supplier declarations confirming that permitted sprays have been used and that applicable pre-harvest intervals have been met. If you have purchased commodities from wholesale or retail, i.e. the commodities were ready to be purchased by a consumer, this is sufficient to ensure suitability for winemaking and should be noted in your records.

Note that suppliers of commodities have a legal obligation to ensure those commodities are suitable for making into wine.

### 4.2 CONTAMINATION

- Where practical, visually inspect incoming commodities for evidence of contamination from oil, grease, hydraulic fluid or other contaminants.
- If contamination is found, then either reject the commodities or take steps to ensure that the resulting wine will not be harmful to human health.
- If purchasing or receiving bulk wine, juice or concentrate that is contaminated:
  - quarantine the wine until it can be re-processed to remove the contamination; or
  - if the contamination cannot be removed, consider the wine unfit for human consumption and ensure that it is appropriately disposed of; and
  - clean and, if necessary, sanitise affected plant and equipment prior to reuse.

Guidance Note: Winemakers should be aware that transporters are legally required to ensure that contaminants are not introduced to commodities, juice or wine during transport.

### 4.3 RECORD KEEPING

- Keep records of the following (refer to Appendix 1):
  - date of receipt or, where relevant, purchase of commodity;
  - supplier identification (if commodity purchased);
  - quantity of commodity received (actual or estimated); and
  - if any contamination was noted, the nature of the contamination and the steps taken to eliminate, minimise or manage that contamination.

Guidance Note: Section 4 requirements apply to commodities sourced from an external supplier and to commodities sourced from own orchards.

## 5 Chemicals and Winemaking Inputs

Version 2

June 2011

### 5.1 INCOMING GOODS

- Check that non-food chemicals (e.g. cleaning and maintenance chemicals) that will be used in or on winemaking equipment are suitable for use in food production facilities.
- Check that food additives and processing aids are permitted for use in winemaking (refer to Appendix 2) and are food grade.

Guidance note: The checks in the first two bullet points may be carried out by checking with the supplier; or by referring to product information data sheets, certificates of analysis or material safety data sheets. These may be available online.

- Check food additives and processing aids upon receipt to ensure:
  - that they are correctly identified; and
  - that there is no contamination or damage to the packaging or the product.
- Check dry goods (corks, filters, etc.), bottles and other wine-contact packaging upon receipt for signs of contamination or damage.
- For incoming bulk wine, juice or concentrate, keep records of the following (refer to Appendix 1):
  - quantities purchased; and
  - the identity and quantities of any additives added into the bulk wine, juice or concentrate up to the time of receipt by the winery.

Guidance notes: Best practice is to record the batch numbers of individual inputs, particularly where large quantities of inputs are purchased.

Records of quantities and additions are necessary to ensure that total additions for the finished wine will be in accordance with the requirements of the Food Standards Code.

### 5.2 IDENTIFICATION AND STORAGE OF GOODS

- Clearly and correctly identify all food additives, processing aids, non-food chemicals (e.g. cleaning and maintenance compounds).
- Store all non-food chemicals in a designated area segregated from food additives, processing aids, dry goods, bottles and other wine-contact packaging materials.
- Maintain a list of all chemicals (food and non-food) used and held in the premises. An example record keeping form is provided in Appendix 3.
- Remove, cover or otherwise protect exposed dry goods, food additives, processing aids, bottles and other wine-contact packaging prior to the use of chemicals (e.g. during cleaning) that may result in their contamination.
- Store food additives, processing aids, dry goods, bottles and other wine-contact packaging materials in a manner that minimises their contamination or damage.

Guidance notes: Glass bottles and other non-perishable packaging or dry goods may be stored outside provided that they are adequately protected or covered to prevent contamination.

Food and non-food chemicals may be stored in separate parts of the storage area as long as they are properly labelled and clearly and physically distinguished from one another.

### 5.3 USE OF NON-FOOD CHEMICALS

- Follow the manufacturer's instructions for use of non-food chemicals.
- Ensure directions for use for all non-food chemicals are readily available to the user, for example: stated on the label, posted on the wall of storage / preparation areas or in readily-available product information data sheets.
- Do not re-use non-food chemical containers for any other purpose.

### 5.4 WINEMAKING ADDITIONS

Ensure that all winemaking additions are in accordance with the requirements of the Food Standards Code (refer to Appendix 2).

- Keep records of any additions to commodities, juice, or wine, including the following (refer to Appendix 1):
  - identity of the additive;
  - amount or volume added;
  - date of addition; and
  - batch/wine into which the addition was made; and
  - if conducted, any chemical analysis pre/post the addition

### 5.5 CONTAMINATION

- If contamination is detected in any bottles or other wine-contact packaging, clean and sanitise the affected packaging material, as necessary, before use. If the affected packaging cannot be effectively cleaned and sanitised, do not use it for packaging wine.
- If broken bottles are detected, as soon as practical:
  - set aside any affected pallets;
  - remove and discard broken bottles; and
  - visually inspect other bottles on the pallet for signs of glass particles, and discard or thoroughly rinse and drain, as necessary, to remove any glass particles.
- If contamination is detected or suspected in any food additive, processing aid or dry goods, either reject it, or remove it from use until the contamination has been eliminated or managed.
- If wine has been released for retail sale, you may need to consider a recall. Refer to Section 14 Recalls.
- Keep records of the following:
  - date, nature and extent of the contamination; and
  - steps taken to minimise, manage or eliminate that contamination.

## 6 Water

Version 2

June 2011

### 6.1 WATER CRITERIA

- Ensure all water used for winemaking or for cleaning and sanitation of winemaking equipment is “clean water”.
- Ensure that water supplied by the winemaker solely for their own use, e.g. bore water, rain water, surface or ground water, is tested at least once every year. The test for E.coli must be done by an approved laboratory (see Guidance note). The test for turbidity can be done in-house if the correct equipment is available, and maintained and calibrated. It is considered “clean water” if it meets the following criteria:
  - Escherichia coli – less than 1 in any 100 ml sample;
  - turbidity – must not exceed 5NTU.

Guidance note: Town supply and water supplied by a third party that is shown to meet the requirements of the Health Act 1956 is considered to be “clean water”.

- Every new source of bore water, rain water, surface or ground water must be tested before use to ensure it meets the criteria for “clean water”.
- When there is any environmental change around the water source that may affect its quality (e.g. flooding), the water should be re-tested within one month.
- If the water does not meet the criteria for “clean water”, re-test the water as soon as practical. If the re-tested water still fails to meet the clean water criteria, that water cannot be used for winemaking. Check the MAF website for [water management guidelines and options](#).

Guidance note: A list of approved [water testing laboratories](#) is available on the MAF website:

### 6.2 RECORD KEEPING

- If using bore water, rain water, surface or ground water, retain records of the results of the annual water test and, if relevant, any other actions undertaken.
- If any contamination from unclean water occurs or is detected in any wine, record the:
  - date, nature and extent of the contamination; and
  - any steps taken to eliminate, minimise, or manage that contamination.

## 7 Winemaking Equipment

Version 2

June 2011

- Ensure that winemaking equipment is constructed from materials that are suitable for making wine, and is maintained in adequate condition to avoid contamination of commodities or wine.
- Ensure that any repairs or maintenance work carried out on plant or equipment does not result in contamination of the wine, e.g. by cleaning on completion; visual checking; making an inventory of movable items removed and replaced.
- Visually inspect winemaking equipment for potential sources of contamination in wine at a minimum, as close as practical before making wine each season, and then as necessary. Refer to the pre-season checklist in Appendix 4.
- Remove any potential source of contamination detected in any winemaking equipment and, if necessary, clean and sanitise the equipment before use.
- Cleaning and sanitation must include adequate rinsing and drainage to remove all traces of cleaning and sanitising chemicals.
- Ensure that winery staff are aware of and exercise good personal hygiene and hygienic practices. Amenities including hand washing facilities should be provided for this purpose.

Guidance note: Wood is a suitable material for winemaking equipment.

Best practice is to set out cleaning and sanitation procedures in a Standard Operating Procedure.

## 8 Cleaning and Sanitation

Version 2

June 2011

### 8.1 WASTE

- Keep general refuse held within, or in the vicinity of the winery in covered containers and ensure they are emptied frequently.
- Remove winemaking waste that may introduce hazards to wine as soon as practical.
- Locate waste depots outside winery buildings, and remove waste stored in depots from the site on a regular basis.

Guidance notes: Best practice is to set out cleaning and sanitation procedures in a Standard Operating Procedure.

### 8.2 PESTS

- Keep the winery free from waste or debris that may provide potential food sources or breeding sites for pests.
- Visually inspect the winery for pests or signs of pest activity prior to the start of each season. Take steps to manage or eliminate pests within the winery. Refer to the pre-season checklist in Appendix 4.
- Do not locate bait stations and insecticides in areas or use them in such a way as to cause potential contamination of wine.

Guidance note: Best practice is to set out pest control procedures in a Standard Operating Procedure.

## 9 Dealing with Contaminated Wine

- If contamination occurs in wine:
  - quarantine the wine until it can be re-processed to remove the contamination, or
  - if the contamination cannot be removed, consider the wine unfit for human consumption and ensure that it is appropriately disposed of; and
  - clean and, if necessary, sanitise affected plant and equipment prior to reuse; and
  - maintain records of contamination incidents.

## 10 Bottling / Packaging

Version 2

June 2011

### 10.1 PACKAGING EQUIPMENT AND PREMISES

- Ensure that bottling and wine-contact packaging equipment comply with the relevant provisions of Section 5 of this Code.
- Ensure that fillers, cappers and corks are set up and maintained properly to avoid chipping of glass.

Guidance Note: Bottling or packaging premises include mobile bottling units. Compliance with standards relating to the bottling unit and equipment supplied by the bottler is the responsibility of the bottler. Compliance with standards relating to the winery premises at which the bottling takes place, and any equipment supplied from that winery, remains the responsibility of the winemaker.

### 10.2 BREAKAGES ON THE BOTTLING LINE

- Prepare a written Standard Operating Procedure for managing breakages or glass chipping on the bottling line. Include procedures for:
  - immediate stoppage when glass breakage or chipping occurs;
  - removal of broken or chipped bottles, as well as all surrounding bottles that may have been contaminated with glass fragments;
  - cleaning and inspection of bottling line to remove any glass fragments; and
  - disposal or re-processing of wine in potentially contaminated bottles.
- Ensure that your Standard Operating Procedure is updated to reflect changes in bottling equipment, plant or procedure. Place a copy of it where it is easily accessible to staff operating the bottling plant.

Guidance Note: Refer to the Model Standard Operating Procedure for Bottling Line Breakages in Appendix 5.

### 10.3 RECORD KEEPING

- Keep records of the following:
  - volume and identification of the lot being packaged or bottled;
  - time and date of packaging or bottling;
  - any additives or processing aids used before or during packaging or bottling; and
  - the identity of all dry goods used in packaged/bottled.
- Record all glass breakages, including steps taken to eliminate, minimise or manage risk of contamination, time and date of the breakage and the identity of the wine being packaged at the time.

# 11 Labelling

Version 2

June 2011

## 11.1 LABEL INFORMATION

- Check labels before use to ensure that they comply with the applicable requirements in the Food Standards Code. Refer to Appendix 6 for guidance on labelling requirements and the pre-season checklist in Appendix 4.

## 11.2 RECORD KEEPING

- Where labels are applied at a separate time or place from where the wine is packaged or bottled, record the:
  - date of label application; and
  - volume and identification of the lot being labelled.

## 12 Storage and Dispatch

Version 2

June 2011

### 12.1 IDENTIFICATION

- Identify wine post packaging/pre-dispatch by reference to wine name and lot identification in such a way that the identity of the wine cannot be accidentally erased or altered.

### 12.2 STORAGE OFFSITE

- If wine (finished, unfinished or packaged) is stored offsite but remains in your (winemaker) ownership, ensure that storage facility complies with the relevant requirements of this Code.

Guidance note: Contract storage facilities that do not operate as wineries are not required to hold a WSMP. It is still the wine producer's responsibility to ensure the storage facility does not introduce hazards to the wine.

### 12.3 BULK WINE AND PACKAGED, UNLABELLED WINE

- If selling or transferring bulk wine or packaged unlabelled wine, provide the receiver with information on:
  - lot identification
  - the type and volume;
  - the alcohol content;
  - records of all additions, including the presence of any allergens in the wine (sulphites, fish-(excluding isinglass), milk- or egg-based fining agents) up to the time of dispatch; and
  - details of any contamination or hazards that may be present in the wine.

### 12.4 RECORD KEEPING

- At dispatch of a particular wine, including bulk and packaged but unlabelled wine, record the following:
  - wine name and lot identification of the wine being dispatched;
  - package size and total volume of wine being dispatched;
  - identity and address of the customer; and
  - date of dispatch.

## 13 Staff and Visitors

Version 2

June 2011

### 13.1 TRAINING

- Ensure that the person responsible for the WSMP is familiar with all requirements of this Code of Practice.
- Ensure winery staff are adequately trained in all aspects of this Code of Practice that fall within their duties.
- Ensure staff training records are kept showing the date, content and persons trained. Refer to the pre-season checklist in Appendix 4.

### 13.2 HEALTH AND HYGIENE

- Winery staff should exercise good personal hygiene, and hand washing facilities should be provided for this purpose.
- Visitors to the winery must be accompanied by a staff member at all times, unless they have a recorded approval from an authorised staff member.
- Winery staff or visitors who are suffering from boils, sores, or infected wounds that are not securely and adequately covered or bandaged may not enter the winery.
- Ensure that winery staff or visitors who are suffering from a confirmed infectious disease or acute respiratory disorder, are not permitted to enter the winery.

Guidance note: Best practice is to set out staff hygiene and visitor procedures in a Standard Operating Procedure.

## 14 Recalls

Version 2

June 2011

### 14.1 RECALL PROCEDURE

- If wine has been released for sale that is, or is likely to be, harmful to human health: immediately contact MAF and the agency that verifies the WSMP; and
- assess whether the wine in question needs to be recalled.

Guidance Note: There may be other circumstances where MAF directs wine to be recalled, for example if a wine label is in breach of wine standards.

Develop and maintain a written recall procedure that covers:

- criteria for deciding when a recall will be initiated;
- designation of persons responsible for conduct of the recall;
- specification of information and resources necessary to conduct the recall;
- requirement to contact MAF and the agency that verifies the WSMP;
- actions to contact persons who have been supplied with the wine in question and make media and trade announcements;
- quarantine and disposal or re-processing of recalled product.

Guidance Note: Refer to the Model Recall Procedure in Appendix 7.

### 14.2 REPROCESSING RECALLED WINE

- Recalled wine may be reprocessed, provided that the resulting product will not be harmful to human health.
- In the case of wine recalled due to the presence of physical contaminants, appropriate processes including racking and passing through a filter of a size sufficient to remove the contaminants.

Guidance note: Best practice is to set out reprocessing procedures in a written Standard Operating Procedure. Common winemaking practice is to use a filter of no more than 0.65 microns.

### 14.3 RECORD KEEPING

- The Model Recall Procedure in Appendix 7 may be used to aid recall decision-making. Use this form to retain records about the problem(s) with the affected wine and decisions made about recall for that wine.

# Appendix 1: Receival, Winemaking and Blending Records

Version 2

June 2011

## RECEIVAL RECORD

Use this to record data about incoming fruit juice, concentrate, honey etc. that is to be fermented into fruit wine, cider or mead.

Date:	
Fruit Type:	
Fresh / Frozen / Juice / Concentrate:	
Amount / Volume:	
Supplier:	
Note Any Hazards:	
Notes:	

## WINEMAKING RECORD

Date:		
Wine / Batch / Lot Code:		
Starting Volume:		

Fermentation Record:	Date:	Notes:

Inputs:	Date:	Input:	Amount / Volume:
			Final Volume:

## BLENDING RECORD

Date:	
New Wine Batch / Lot Code:	

Blend Components:	Wine Batch / Lot Code:	Volume:

Inputs:	Input:	Amount / Volume:

Final Volume:	
---------------	--

Final Volume:	
---------------	--

Analysis:	pH:	SO <sub>2</sub> :	Alcohol:

## Appendix 2: Permitted Winemaking Additions

Version 2

June 2011

The following winemaking additions are permitted under the Australia New Zealand Food Standards Code: Permissions for the relevant standards are summarised in the following table. For further information and updates refer to the [Food Standards Code](#)

INGREDIENTS (Standard 2.7.3)	
Fruit wine, vegetable wine and cider may contain	
Fruit juice and fruit juice products	
Vegetable juice and vegetable juice products	
Sugars	Permitted sugars are defined in Standard 2.8.1.
Honey	Honey is defined in Standard 2.8.2
Spices	
Alcohol	
Water	Must be "clean" water (see section 6 of this document)
FOOD ADDITIVES (Standard 1.3.1, Schedule 1)	
A food additive is any substance that is not normally consumed as a food in itself and not normally used as an ingredient of food, but which is intentionally added to a food to achieve a technological function. Food additives or their by-products may remain in the food.	
Additive name	Maximum permitted level
Acetic acid, glacial	Good Manufacturing Practice (GMP) <sup>1</sup>
Ammonium phosphates	GMP
Ammonium carbonates	GMP
Ascorbic acid	GMP
Benzoic acid & sodium, potassium and calcium benzoates	400 mg/kg
Calcium carbonates	GMP
Calcium phosphates	GMP
Calcium sulphate	GMP
Caramel I – plain	1000 mg/kg
Caramel II – caustic sulphite process	1000 mg/kg
Caramel III – ammonia process	1000 mg/kg
Caramel IV – ammonia sulphite process	1000 mg/kg
Carbon dioxide	GMP
Citric acid	GMP
Erythorbic acid	GMP
Fumaric acid	GMP
Lactic acid	GMP
Malic acid	GMP
Metatartaric acid	GMP
Potassium carbonates	GMP
Potassium tartrate	GMP
Sodium carbonates	GMP
Sodium erythorbate	GMP
Sorbic acid and sodium, potassium and calcium sorbates	400 mg/kg
Sorbitan monostearate	GMP
Sulphur dioxide and sodium and potassium sulphites (220, 221, 222, 223, 224, 225, 228)	Wine containing less than 5 g/L residual sugar: 200 mg/kg Wine containing more than 5g/L residual sugar: 300 mg/kg
Tannins	GMP
Tartaric acid	GMP

<sup>1</sup> Addition in accordance with GMP means adding the lowest amount necessary to accomplish the desired technological effect.

## Appendix 2: Permitted Winemaking Additions

<b>PROCESSING AIDS (Standard 1.3.3)</b>	
Processing aids are substances that are used in the processing of raw materials, foods or ingredients to fulfil a technological purpose relating to treatment or processing, but do not perform a technological function in the final food.	
Processing aids must be used in the course of manufacture of wine at the lowest level necessary to achieve the relevant technical function, irrespective of any maximum permitted level specified.	
Standard 1.3.3, Clause 2 lists general prohibition on the use of processing aids.	
Unless expressly permitted in this standard, processing aids must not be added to food.	
Standard 1.3.3, Clause 3 lists generally permitted processing aids:	
(a) Foods including water	
(b) Food additives listed in Schedule 2 of Standard 1.3.1	
(c) Processing aids specified in the table to Clause 3	
The most commonly used processing aids for winemaking are listed below. However, Schedule 2 of Standard 1.3.1 and Standard 1.3.3 and any updates should be consulted for a complete listing.	
Permitted processing aid	Maximum permitted level
Acacia (gum arabic)	GMP
Activated carbon	GMP
Agar	GMP
Alginates (alginic acid, sodium, potassium & calcium alginates)	GMP
Argon	GMP
Bentonite	GMP
Calcium alginate	GMP
Calcium sulphate (gypsum)	GMP
Casein	GMP
Cellulose (microcrystalline & powdered)	GMP
Cupric (copper) sulphate	GMP
Cupric citrate	GMP – for removal of sulphite compounds in wine
Diatomaceous earth	GMP
Dimethyl dicarbonate	200mg/kg
Polydimethylsiloxane (Dimethyl polysiloxane)	GMP
Egg whites	GMP
Enzymes	Refer to Std 1.3.3 Clauses 15-17 for permissions for specific enzymes
Ethyl alcohol	GMP
Hydrogen peroxide	5mg/kg – as bleaching agent or for removal of sulphur dioxide
Ion exchange resins	GMP, Refer to Std 1.3.3, Clause 8 for permissions for specific ion exchange resins
Isinglass ( and other fish collagens)	GMP
Kaolin (aluminium silicate)	GMP
Lysozyme	GMP
Malolactic bacteria	GMP
Milk and milk solids	GMP
Nitrogen	GMP
Oxygen	GMP
Phytates (includes phytic acid, magnesium phytate and calcium phytate)	GMP
Polyvinyl polypyrrolidone	100 mg/kg
Potassium alginate	GMP
Potassium ferrocyanide	0.1 mg/kg
Potassium tartrates	GMP
Proteases (proteinases and peptidases)	GMP
Silica or silicates	GMP
Tannic acid	GMP
Yeasts	GMP
Yeast nutrients	GMP, refer to Std 1.3.3 Clause 18 for permissions for specific yeast nutrients.





## Appendix 4: Wine Standards Management Plan Pre-Season Checklist

Version 2

June 2011

Use this checklist to assist in compliance with the WSMP Code of Practice. The checklist should be completed at a minimum as close as practical before the start of the season and then as necessary.

<p>1. List all chemicals held in the winery. (List templates attached to this document)</p>	<p><input type="checkbox"/> Task completed Checked by: Date:    /    /</p>
<p>2. Check that non-food chemicals such as cleaning products are safe for use in food production facilities.</p>	<p><input type="checkbox"/> Task completed Checked by: Date:    /    / Outline steps taken: <input type="checkbox"/> confirmation from supplier; <input type="checkbox"/> product information data sheets; <input type="checkbox"/> certificates of analysis; <input type="checkbox"/> material safety data sheets; <input type="checkbox"/> other (give details):</p>
<p>3. Check that winemaking additives and processing aids are food grade.</p>	<p><input type="checkbox"/> Task completed Checked by: Date:    /    / Outline steps taken: <input type="checkbox"/> confirmation from supplier; <input type="checkbox"/> product information data sheets; <input type="checkbox"/> certificates of analysis; <input type="checkbox"/> material safety data sheets; <input type="checkbox"/> other (give details):</p>
<p>4. If used, check that: <input type="checkbox"/> bore water; <input type="checkbox"/> rain water; <input type="checkbox"/> surface water; or <input type="checkbox"/> ground water; used in winemaking or cleaning is "clean".</p>	<p><input type="checkbox"/> Task completed Checked by: Date:    /    / Attach copy of laboratory analysis obtained within the last 12 months.</p>
<p>5. Inspect winery and equipment for potential sources of contamination.  The winery and winemaking equipment should be constructed of materials that are suitable for making wine and maintained in adequate condition to avoid contamination of juice or wine.</p>	<p><input type="checkbox"/> Task completed Checked by: Date:    /    / Outline steps taken:</p>
<p>6. Check that winemaking equipment and premises are cleaned and, if needed, sanitised in preparation for vintage.  Cleaning and sanitation processes must include adequate rinsing and drainage to ensure that contamination with cleaning and sanitising chemicals is prevented.</p>	<p><input type="checkbox"/> Task completed Checked by: Date:    /    / Outline result and steps taken:</p>

## Appendix 4: Wine Standards Management Plan Pre-Season Checklist

<p><b>7. Inspect winery for pests or signs of pest activity.</b> The winery should be kept free from waste or debris that may provide potential food sources or breeding sites for pests. Do not locate or use bait stations and insecticides in such a way as to cause potential contamination of wine.</p>	<p><input type="checkbox"/> Task completed Checked by: _____ Date:     /     / Outline result and steps taken:</p>
<p><b>8. Nominate someone in your business to check that wine labels comply with the Food Standards Code.</b></p>	<p>Name/title of nominated person/position:</p>
<p><b>9. Check that winery staff are adequately trained on all aspects of the Wine Standards Management Plan that relate to their duties.</b></p>	<p><input type="checkbox"/> Task completed Checked by: _____ Date:     /     / Outline steps taken: <input type="checkbox"/> provided with copies of relevant documentation; <input type="checkbox"/> induction procedure; <input type="checkbox"/> training – on the job / training sessions; <input type="checkbox"/> other (give details)</p>

# Appendix 5: Model Standard Operating Practice: Bottling Line Breakage

## 1. Application

This procedure must be followed whenever a bottle is broken during de-palletisation or on the bottling line.

## 2. Breakage Procedure

### *Stop the line*

Stop the bottling line as soon as a breakage is detected.  
Determine the source of the breakage.

### *Cleaning*

#### *General*

Remove glass on and around affected parts of the bottling line: use a brush, paper towels or a vacuum cleaner first. Don't blast with air or use other methods that might spread fragments. Follow with a liquid clean down if necessary.  
Use a torch after cleaning to detect reflections from any remaining fragments. If fragments detected, following cleaning procedure until no more fragments detected.

#### *De-palletisation*

Remove and inspect all bottles on the track between pallet and filler head and rinse or discard as necessary to remove risk of glass fragments remaining in the bottle.

#### *Rinser*

Remove and inspect all bottles in rinser and rinse or discard as necessary to remove risk of glass fragments remaining in the bottle.

#### *Filler head*

Bottles either side of the breakage or chipping must be removed and wine discarded or re-processed. Bottles should not be re-used. The number of bottles removed will depend on the design of the filler unit [specify the number of bottles].

The next bottle filled from the same filler head must be checked for glass fragments by passing liquid from the bottle through filter paper. Continue checking bottles from that filler head until no glass fragments are detected.

If the filler head cannot be identified, all bottles in the filler must be removed and discarded or re-processed. Bottles should not be re-used.

---

*Corker / stopper machine / screwcapper*

Bottles either side of the breakage or chipping must be removed and wine discarded or re-processed. Bottles should not be re-used. The number of bottles removed will depend on the design of the closure unit [specify the number of bottles].

The next bottle closed by the same corker/stopper/screwcap head must be checked for glass fragments by passing liquid through filter paper. Continue checking bottles from that head until no glass fragments are detected.

The hopper containing corks/stoppers/screwcaps must be checked for glass fragments.

***Corrective action***

Determine why breakage occurred and rectify to avoid repeating breakage once bottling resumes, e.g. check the calibration and set-up of the plant and equipment where breakage occurred.

***Sign-off***

Breakages must be recorded as part of the WSMP (in Breakage Book or similar), including number of bottles broken and removed for inspection, the bottle code(s) involved, the disposition of bottles removed for inspection, cleaning procedures and corrective action undertaken.

Records must be signed off by the Bottling Line Supervisor before bottling resumes.

**3. Re-processing Procedure**

Disgorge bottles for re-processing into a receiving tank that is not used for direct supply of the bottling line. Wine must not be returned straight to the filler tank.

Filter wine through sterile grade cartridges according to standard procedures. Filter off racking valve, leaving behind any glass that may be present. This may then be filtered using a standard racking wand with careful observation to ensure that any glass is not picked up.

Any pads used for this operation are not to be back flushed and should only be used for such filtration.

At the completion record the number of bottles disgorged, the bottle code(s) involved, the volume of wine recovered and its disposition. Also record any relevant details as to type of glass recovered and any bottle damage noted.

[Note that the WSMP operator should include health and safety procedures in Standard Operating procedure as appropriate.]

## Appendix 6: Labelling Requirements

Version 2

June 2011

Mandatory Requirements (Standards 1.2.2, 1.2.2, 1.2.3, 1.2.5, 1.2.9, 2.7.1)	
The following requirements in the Food Standards Code apply to all wine for sale in New Zealand.	
Legibility (Standard 1.2.9)	Any mandatory items must in English, legible and prominent and set out so they are distinctly contrasted to the background.
Name of food (Standard 1.2.2)	All wine must bear a name or description sufficient to indicate the true nature of the food (e.g. "sparkling wine", "mead" etc.).
Lot identification (Standard 1.2.2)	All wine must bear a lot identification on the package. If there is just one bottling of a particular wine then there is no need for a separate lot number, as the lot is self-defined.
Name and address of supplier (Standard 1.2.2)	All wine labels must bear the name and business address in New Zealand or Australia of the supplier. The "supplier" may be the producing winery, packer, vendor or importer. The address must be a physical address.
Alcohol declaration (Standard 2.7.1)	All wine must bear an alcohol declaration. The acceptable form for the declaration is 'ml/100g' or 'ml/100 ml' or 'x% alcohol by volume' or words or expressions of the same or similar meaning – i.e. "% vol" will suffice. Tolerances of the declared alcohol content from that actual alcohol content are: cider +/- 0.3%, fortified fruit or vegetable wine: +/- 0.5%; fruit wine (incl sparkling) and fruit or vegetable wine products containing > 6.5% alcohol by volume: +/- 1.5%.
Net contents (Weights and measures regulations 1999 and amendments)	All wine must bear a statement of net contents (e.g. 750ml).
Standard drinks (Standard 2.7.1)	All wine must bear a standard drink declaration. The form of the standard drink statement is: "contains approx. X.X standard drinks". The formula for calculating the number of standard drinks is: 0.789 x the actual alcohol content x the volume of the container (in litres).
Date of labelling (Standard 1.2.5)	Date labelling is not required for bottled wine, but may be for wines with a shorter shelf life, such as bag-in-box.
Allergen labelling (Standard 1.2.3)	All wine must bear a sulphite declaration if it contains more than 10 mg/kg of sulphur dioxide. The form of the statement is: "contains preservative 220" (or 221, 222, 224, 224, 225, 228), "contains sulphites", or "contains sulphur dioxide".  A wine label must include an allergen declaration if fish, milk, or egg products are present. Singlass is now exempt from allergen labelling, although other fish products still need to be included in allergen declarations.
Prohibited labelling on wine (Standard 2.7.1 and 1.1.A.2)	Wines are prohibited from bearing health claims, or making representations as to being low in alcohol or non-intoxicating etc.

# Appendix 7: Wine Standards Management Plan: Model Recall Procedure

Version 2

June 2011

## Recall Policy

In the event a wine needs to be recalled, the winemaker must facilitate the efficient identification and removal of that wine from the distribution chain including, where necessary, informing consumers.

## What is Recall?

Recall is the isolation and removal of wine from the entire distribution chain, including from storage, retail, and consumers.

Wine that is removed from the distribution chain but not from consumers is known as withdrawal, or trade recall.

## Reasons Why a Wine May be Recalled

Recalls may be initiated by the winemaker/winery or directed by MAF under the Wine Act 2003 and/or the Food Act 1981.

There are three situations that may require wine to be recalled:

1. where it is unsafe, or it is suspected to be unsafe, for human consumption;
2. where a wine does not comply with wine standards, including the Australia New Zealand Food Standards Code;
3. where fraud is suspected.

## Recall Procedure

Even if the wine falls into one of the above situations, other factors may influence whether or not the wine needs to be recalled. Refer to the Recall Decision Making form at this end of this recall procedure.

When a decision has been made to recall a wine, follow the process outlined below. Accurate records of all decisions and steps taken to resolve the issue must be kept as part of your WSMP.

## Inform MAF

When the decision to recall a wine has been made, inform MAF immediately: on [operational.response@maf.govt.nz](mailto:operational.response@maf.govt.nz) and/or 04 894 2500 or 0800 366 399.

MAF may provide advice and assistance to operators. The operator will issue consumer advice and/or statements regarding the recall. These must be approved by MAF before publication. MAF may issue additional advice or statements at any time.

The winemaker should also inform their wine standards management plan verifier.

---

## **Notify the Distribution Chain**

Notify all distributors, storage facilities and customers (telephone, email or fax). Ensure that all contact details are easily and quickly accessible. Follow up with a 'Notification of Recall' notice.

## **Notify the Consumer**

This is likely to include advertisements in the leading daily newspaper in regions where the wine is sold (paid for by the wine company) and could also include:

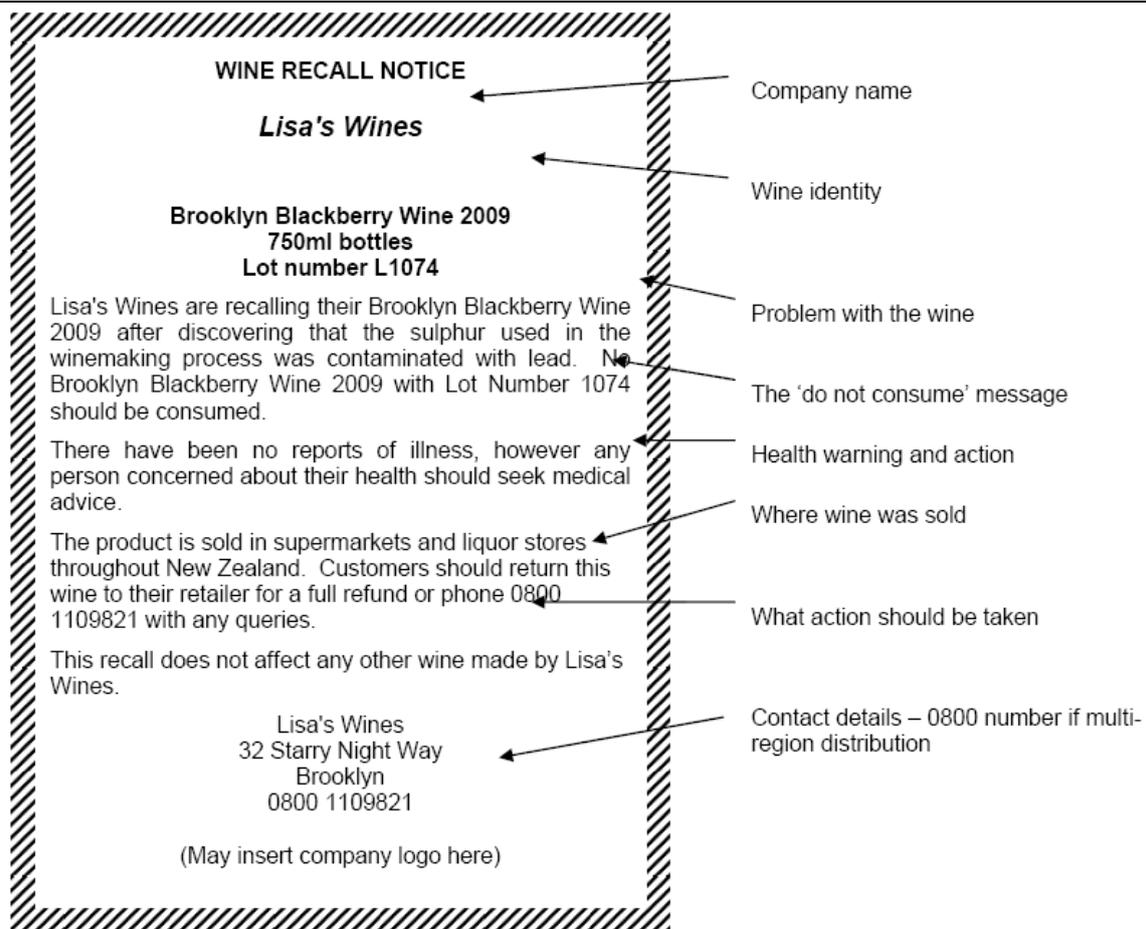
- Media releases;
- Notices at locations where the wine has been sold.

## **Recall Advertisement**

The food recall advertisement must meet the following requirements.

- Minimum size of 2 columns by 10 centimetres
- The advert must have a cross-hatched border
- Heading should be "Wine Recall Notice"
- No promotional information. Any use of company logo must not detract attention from the recall message.
- The advertisement should appear in the main body of the newspaper, not in the classified section.

Draft advertisements should be submitted to MAF to ensure wording is satisfactory and avoid MAF having to issue their own statement.



## Returned Wine

Accurate records of identities and quantities of returned wine must be kept. Recalled wine returned to the winemaker must be segregated from other wine. Determine whether wine can be reprocessed or relabelled and released for sale or whether it must be disposed of. Keep a record of the decision.

## Corrective Action

Corrective action to prevent the issue reoccurring must be undertaken and documented.

## Further information

More detailed guidance is on the [MAF website](#):

## Recall Decision Making

This form is to aid recall decision making and for record-keeping purposes.

1. Brand / Wine Name	
2. Date	
3. Company Contact Details	
3a. Contact Person / Position	
4. Wine Identity Information Wine name(s) Lot numbers (if relevant) Quantity of affected wine Location of wine (in tank, barrels, bottles, off site storage in tank, barrels, bottles) Package sizes Are lots/batches before and after also affected?	
4a. Is ALL the Wine still in Company / Distribution Control (not yet with Consumers)? <input type="checkbox"/> Yes –Determine whether wine can reprocessed or relabelled and released for sale or must be disposed of. <input type="checkbox"/> No – Recall possible, proceed with form.	
5. Hazard / Non-compliance <input type="checkbox"/> Microbiological contamination <input type="checkbox"/> Chemical contamination <input type="checkbox"/> Physical contamination <input type="checkbox"/> Undeclared allergen (including sulphite) <input type="checkbox"/> Labelling incorrect <input type="checkbox"/> Other Has any testing been done? If yes, details.  Does the product fail to meet a requirement in the Food Standards Code or a wine standard?	Details
5a. Does the Hazard / Non-compliance have the Potential to cause Harm to Human Health? <input type="checkbox"/> Yes – recall possible, proceed with form <input type="checkbox"/> No – recall not required, unless other factors indicate otherwise (see section 10). Company's own commercial risk to recall or not. Corrective action to prevent reoccurrence to be undertaken and documented.	
6. Distribution Where has product been distributed / sold?  How much has been distributed?  Has product been exported? If yes provide identification for the affected wine, quantities, where it is in the distribution chain (name of distributors, name of retailers, countries exported to)?	
7. Cellaring Advice Was there any cellaring advice? If yes, how long?	
8. Consumer/Medical Reporting Have there been consumer complaints relating to this product? Any reports of illness?	
9. Expert Opinion Any experts consulted? Advice given?	Details

## Appendix 7: Wine Standards Management Plan: Model Recall Procedure

<b>10. Can steps be taken to remove the hazard/non compliance identified in 5?</b> <input type="checkbox"/> Yes – follow recall procedure <input type="checkbox"/> No	List details of processing steps that may be used to remove any hazards/non compliances in the affected wine
<b>11. Recall Decision</b> <input type="checkbox"/> Yes – follow recall procedure, provide details of fate of returned product <input type="checkbox"/> No	Detail reasons.