

RIVERINA WINEGRAPE GROWERS

HACCP

FOOD SAFETY

MANAGEMENT

SYSTEM

FOR

WINEGRAPES

Vineyard (business) name:

Vineyard address:

NB. Hereafter in this manual, "The Vineyard" refers to the business written in above.

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1. INTRODUCTION

This HACCP based Management System to ensure that we provide:

- grapes to the winery that will not compromise the food safety aspect of the wine they produce

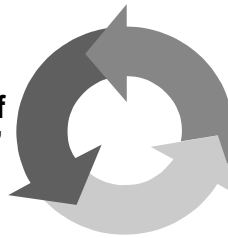
We recognise we are a key supplier of the winery.

This system was developed according to the Codex Alimentarius Commission system and guidelines for the application of a HAACP based system. This can be found on page 33 of the Codex Alimentarius Food Hygiene Basic Texts issued by the Joint FAO/WHO Food Standards Program, FAO, Rome (1997). The seven principles of HACCP have been applied by following the 12 steps as identified by the “Guidelines for the application of the HACCP system” contained in the above booklet. A 13th step of developing “support programs” has been added.

This system identifies specific hazards in our operation that may affect the food safety aspects of the winegrapes we produce. It assesses those hazards and establishes control mechanisms that focus on stopping the problem before it occurs. This provides the benefit of timely response to potential problems and better use of our resources.

The success of this system relies on the commitment of the people who use it.

The systems success will be a direct measure of the stakeholders' commitment.



The commitment of the stakeholder will be a direct measure of the systems' success.

Winery Reps

Greg Rossi

Paul Harvey

Jason Cook

Rob Glastonbury

Growers (any 2 listed)

Bruno Brombal

Bruno Altin

Tony Baggio

Frank Alampi

Bob Bellato

Dom Schirripa

Kirsten Dal Broi

Others

Brian Bortolin

2. HACCP TEAM – Step 1a

At a HACCP Team meeting on 1st December 2009 it was resolved that:

- The HACCP team is to include 4 winery reps and 4 growers.
- A HACCP Team meeting quorum to be a minimum of 1 grower and 1 winery rep.

The current HACCP Team is listed on page 3 of this manual.

During system development, the original team met as and when required overseeing the implementation of the plan. The current team meets as required (minimum twice per year) to manage the system (agenda as per Form 11). Minutes for each meeting are recorded by the RWG.

3. INITIAL TRAINING

HACCP Awareness Sessions are carried out as part of the implementation program. (Riverina Wine and Food Tech Centre can provide evidence of attendance.) Broadly, the aim is to ensure all Vineyard Managers knew what is being done, and why.

The desired outcome is to achieve an understanding of the:

- 7 HACCP principles
- 12 steps in developing a HACCP plan
- importance of the *scope and purpose*
- definition of a Critical Control Point (CCP)
- methods of controlling a CCP
- various HACCP support programs
- how this system can help you in your job
- relevance to the wineries operations

The level of understanding desired is one that:

- permits Vineyard Managers to have input into the HACCP Plan (that adds value to the workplace)
- provides the background knowledge to use the system once it is in place

Once implemented, a one on one follow up session is held using the HACCP Awareness Log (Form 02) as the basis for the training. Each current employee then has a completed HACCP Awareness Log.

4. SCOPE – Step 1b

This HACCP Food Safety Management System covers the production of:

- wine grapes at The Vineyard

The wine grapes process is deemed to be a yearly cycle commencing with post harvest irrigation and finishing with the arrival of grapes at the winery.

The system seeks to eliminate or control physical, biological and chemical hazards that may be present, or develop during, the above yearly cycles.

This is achieved by adhering to the 7 HACCP principles, demonstrated in the HACCP Table, thus identifying factors that are *critical to the above outcome at this site*.

5. PURPOSE – Step 1c

The purpose of this system is to ensure that we meet the food safety requirements of the:

- winery in relation to the production of wine grapes

6. HOW IS THE PRODUCT DEFINED? – Step 2

Grapes are the fruit produced by the vines. They are:

- (often) preserved with metabisulphite at point of harvest
- transported via open truck or in steel bins
- ideally kept below 30° C (white grapes)
- best crushed within 12 hours of harvest

7. HOW IS THE PRODUCT USED BY THE CUSTOMER? – Step 3

The Vineyard intends for its grapes to be used in the production of wine by the winery. The Vineyard understands that the wine produced:

- is intended for human consumption by the responsible adult population
- contains sulphites, alcohol and other preservatives that some of the population may be sensitive to
- must not contain chemical residues above the Maximum Residual Limit (MRL) for each chemical

8. PROCESS FLOW PREPARATION AND VERIFICATION – Steps 4 and 5

There is one Process Flow covering wine grapes production. This was developed directly from a verbal description of the process given by the HACCP Team.

This Process Flow is confirmed as real and true to reality by the HACCP Team.

9. HACCP TABLES – Steps 6, 7, 8, 9 and 10

9.1 The HACCP Table – key component

The HACCP Tables were prepared in alignment with the General Principles of Food Hygiene CAC/RCP 1-1969

[https://www.loex.de/files/downloads/lebensmittel/Codex%20Alimentarius%20\(EN\).pdf](https://www.loex.de/files/downloads/lebensmittel/Codex%20Alimentarius%20(EN).pdf).

The HACCP Table show the hazards (column 2) taken directly from the relevant step of the Process Flow (column 1). Not all steps in the Process Flow had hazards present. Thus only those with hazards are listed.

Any current or proposed control measure(s) is listed in Column 3. Column 4 identifies the hazard as *critical* or standard eg. CCP = Critical Control Point; CP = Control Point (Standard). **Critical Hazards are shaded grey in the HACCP Tables.**

The limit (boundary) is identified in column 5. This is the point at which the hazard is out of control.

Monitoring (how, when, by whom) is covered in columns 6, 7 and 8.

Column 9 shows what to do if the check finds that the hazard is out of control, or drifting toward loss of control. Column 10 shows written records relevant to the hazard control.

9.2 Step 6 – List all hazards and consider preventative measures

The HACCP Team confirmed this step, and steps 9.3 to 9.6 – meeting minutes confirm this.

Those hazards considered were as per the Scope (Section 4, Paragraph 3) of this Food Safety Management System. Preventative measures are, in a lot of cases, the use of Standard Operating Procedures (SOP's). Appendix One contains a table of the SOP's in place.

9.3 Step 7 – Identification of Critical Hazards and CCPs

Hazards considered were those that would compromise wine consumer health.

All hazards identified in Step 6 were considered and “risk assessed” using the following table.

Disruption →	Major	Moderate	Minor
Food Safety	people WILL get sick (or suffer injury)	may effect people mildly	unlikely people will get sick (or suffer injury)
Occurrence ↓			
Almost Certain	A	A	B
Likely	A	B	B
Possible	A	B	C
Unlikely	A	B	C
Rare	B	C	C

An “A rated” hazard was deemed to be Critical – potentially a CCP. The ratings are shown in the HACCP Table, column 2, in square brackets e.g. [A]. “B” and “C” rated hazards were noted and control measures stated if applicable.

To determine whether potential CCP's were actually that, the HACCP Decision Tree (page 30 of General Principles of Food Hygiene CAC/RCP 1-1969) was used. **CCPs are shaded grey in the HACCP Table.**

9.4 Step 8 – Establish Critical Limits for each Critical Hazard (boundaries)

The experience of the HACCP Team members was drawn upon in establishing these. In a lot of cases they were common sense and clear cut – the hazard is either breached or not.

9.5 Step 9 – Establish a monitoring system for each critical hazard

The monitoring (checking) system describes how the system is monitored (checked) – how, when and by whom.

9.6 Step 10 – Establish corrective actions

Corrective actions (what to do if the hazard is out of control) were established for each critical hazard. It is often the case of refer back to the SOP, or seek advice.

10. VERIFICATION (HACCP PRINCIPLE 6) – Step 11

10.1 Internal Audits

Audits are conducted each year as per SOP 04 (and Form 04). The audits are timed to coincide with the growing season key phases (from a food safety view point) e.g. growing season and harvest. The audits focus on the day to day running activities of the HACCP based Food Safety Management System, not the establishment of it. Audit frequency is as per the table below.

	November	May
First Year of Program	Required – Driven by RWG. Winery rep to accompany if they desire.	Required – Driven by RWG. Winery rep to accompany if they desire.
Subsequent Years	Wineries discretion – Driven by wineries. RWG rep to accompany if they desire	Required – Driven by RWG. Winery rep to accompany if they desire.

10.2 CCP verification

The RWG will work with wineries in CCP verification.

Wineries will send the required samples to AWRI for MRL testing. Immediately after vintage the RWG will request copies of a minimum of 2 grower grape sample results from each winery spread across participating wineries with a total of 10 grower results required by the RWG per vintage.

In the event a winery receives an above MRL result from a grower sample:

- That result must be included in those past onto the RWG.
- The RWG will work with the winery in investigating the circumstances of the above MRL result.

The test results are referenced back to stated MRL's:

- (Australia only) as Australia New Zealand Food Standards Code – Schedule 20 – Maximum residue limits, <https://www.legislation.gov.au/Details/F2016C01007>.
- International – as per AWBC direction.

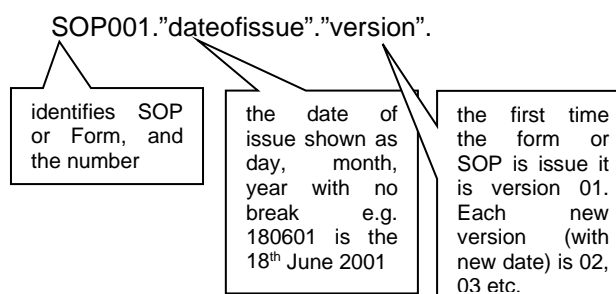
11. RECORDS AND DOCUMENTATION – Step 12

The RWG controls the documentation associated with this Food Safety Management System. The RWG is responsible for:

- **updating the manual** ensuring that the reference in the bottom left corner is changed.
- **changing SOP's** ensuring that the reference in the bottom left corner is also changed.
- **modifying forms** ensuring that the reference in the bottom left corner is also changed.

All records are filed by the Vineyard Manager and/or RWG are held for 7 years.

The manual, reference system is in 4 parts. The Forms and SOP's are in 3 (no company name):



E.g. form03.190802.02 is Form 03 issued for the second time on the 19th August 2002.

The total HACCP Food Safety Management System folder can be found in the Vineyard Managers office. This is the only “controlled version”.

12. SUPPORT PROGRAMS

12.1 *Approved Suppliers*

SOP 06 covers the selection of manufacturers as Approved Suppliers, and the purchasing process involved. The selection criteria for the manufacturers are covered in the SOP introduction.

12.2 *Training*

All new full time employees (and existing ones upon HACCP implementation) are taken through an “Awareness Session” by the Vineyard Manager. The relevant points are contained on Form 02 in each employee’s file held by the Vineyard Manager.

All Contract and Casual employees are taken through a similar “Awareness Session” as per Form 07.

12.3 *Equipment calibration program*

Appendix Three contains a log of all vineyard machinery that requires routine calibration. The log contains the:

- machine name
- who calibrates it or how it is calibrated
- frequency of calibration

The Vineyard Manager maintains a file that contains current certificates of calibration (Form 08) for each listed instrument.

12.4 *Good Vineyard Housekeeping Practice*

A GHP (Good Vineyard Housekeeping Practice) program is in place and covers the vineyard. The essential components are:

- SOP 07 – Good Vineyard Housekeeping Practice
- Form 03 – Quarterly Vineyard Housekeeping Check

12.4.1 Smoking Policy

Smoking is not permitted within 5 meters of the harvester, harvested fruit and harvesting containers. Signs are in place where possible.

The aim is to reduce the risk of contamination of winegrapes by cigarette ash or butts. It should be remembered that the winegrapes are a drink ingredient, thus basic hygiene principles apply. Cigarette butts must be placed in bins where provided. They must not be discarded on the property.

12.4.2 Personal Hygiene

Clothing

All staff are expected to wear reasonable attire. No open shoes should be worn.

Personal hygiene

Employees are expected to keep themselves clean (taking into account the nature of the work).

Loose jewellery shall not be worn when on the Vineyard grounds. Watches and wedding bands are acceptable.

12.5 ID and Traceability

All Farms are to be identified by a Farm Plan. All blocks on farm are to be identified on the corner posts with the same words / letters / numbers as used on the Farm Plan. This is noted in the HACCP Table.

All spraying and harvesting is recorded. All forms associated with such work identify the variety and block, as above, on the form. Chemical batch numbers are recorded in the Spray Diary.

12.6 Customer Complaints

Customer Complaints (from the winery) are seen as an opportunity for improvement (which is what they are!). See 12.8 below.

12.7 Preventative Maintenance

A Preventative Maintenance program is in place during grape harvest (to assist in managing the risk of hydraulic oil contamination). Preventative Maintenance actions for harvesting equipment with hydraulics are documented on Form 06a or 06b.

Form 06a is used by growers with their own harvesting equipment. It is to be completed weekly.

Form 06b is used by RWG HACCP trained Contract Harvesters. HACCP trained Contract Harvesters can, at the start of vintage, provide the grower with a copy of their compliance certificate issued by the RWG, or another approved certificate. If this is done, there is no need to provide the grower with a copy of Form 06b each time harvesting occurs. If there is no certificate on file, the grower must have a copy of Form 06b for each harvest conducted that vintage.

12.8 Opportunity for Improvement (OFI)

Improvement opportunities are *recommended* actions to improve. They may include:

- Changes to procedures
- Actions taken against non-conforming Approved Suppliers
- Customer complaints (see Section 12.6)
- Any other improvements relating to Food Safety

We endeavour to question the system at all times and make improvements.

All OFI's are logged on Form 05. (Form 05 is simply a record of what was done about something that can be done better!)

12.9 Product Recall

A product recall will be initiated when wine food safety, due to poor grape quality, is severely compromised and the winery should not handle the grapes.

There are two main steps in this exercise (that can obviously only happen during vintage / harvest):

- immediately notify the Winery GLO
- follow SOP 05 in handling the non conforming product (that the Winery will now have on its hands)

12.10 Specifications

A product specification (one or more depending on varieties involved) is sought from the winery prior to the commencement of the growing season each year. This is held on file by the Vineyard Manager and is used as the “target on the wall” for supply of wine grapes.

12.11 Chemical storage

Farm chemicals for use in spraying can be stored in a shed designed with reference to Page 48 and 49 (Section 10.5) of the ‘Code of Practice for Safe Use and Storage of Chemicals (including Pesticides and Herbicides) in Agriculture’. This Code of Practice can be accessed from the Workcover NSW website as follows –

<https://www.safeworkaustralia.gov.au/media-centre/news/new-chemical-storage-guide-workplaces>

The RWG provides copies as requested.

12.12 MI policy on water use from channels

Murrumbidgee Irrigation (MI) (Natasha James – 19/12/02) stated that a policy exists for the filling of chemical spray carts from MI channels. In brief, this policy states that no spray cart is to be filled directly from a MI channel. Farmers can fill from their own channel provided:

- they are downstream from their “wheel”
- the point of filling is vertically lower than the surface of the MI channel (no possibility of backflow)

12.13 Painting of grape equipment

All painted equipment, excluding stainless steel, that comes in contact with grapes must be painted with a product that is “Suitable for use in the Food Industry”. Care is to be taken that the recommended drying/curing time is allowed for between painting and use. All painting of “grape contact equipment” is to be recorded on Form 10, noting the drying/curing time and the “must not be used before ...” date.

(NB. The RWG notes that 1 product is currently available in the MIA – Amerlock.)

13. CHEMICAL USE (FROM HACCP PERSPECTIVE)

13.1 Chemical list

All chemicals used on The Vineyard are registered for use as per Steps 30 or 33 of the Purchasing SOP (06).

13.2 Users of chemicals

All Vineyard operatives have current certificates that show completion of an accredited "Safe Chemical Use" course.

APPENDIX ONE – SOP’S TABLE

SOP #	Title	Section	File held ...
01	Spraying	Vineyard	Vineyard
02	Spraying close to harvest	Vineyard	Vineyard
03a	Calibration of sprayers (conventional)	Vineyard	Vineyard
03b	Calibration of air shear sprayer	Vineyard	Vineyard
04	Internal audit	Vineyard	Vineyard
05	Non conforming material	Vineyard	Vineyard
06	Purchasing (Table 1.)	Vineyard	Vineyard
07	Good vineyard housekeeping practice	Vineyard	Vineyard

APPENDIX TWO – FORMS TABLE

Form No.	Title	Section	Original file held
01	Delivery note	Vineyard	Vineyard
02	HACCP System Awareness Log	Vineyard	Vineyard
03	Monthly vineyard housekeeping check	Vineyard	Vineyard
04	Internal audit	Vineyard	Vineyard
05	Opportunity for improvement	Vineyard	Vineyard
06a	Harvesting preventative maintenance	Vineyard	Vineyard
06b	Harvesting preventative maintenance (contractors)	Vineyard	Vineyard
07	Contract & casual employees awareness	Vineyard	Vineyard
08	Calibration record	Vineyard	Vineyard
09	Checklist (front cover)	Vineyard	Vineyard
10	Grape equipment painting record	Vineyard	Vineyard
11	HACCP Team meeting agenda	Vineyard	Vineyard
12	Advice to spray (inside WHP)	Vineyard	Vineyard
	Spray diary (supplied by RWG)	Vineyard	Vineyard

APPENDIX THREE – MACHINE CALIBRATION LOG

No	Machine Name	Description	Calibrated by ...	Frequency / year
01		Fungicide sprayer		Once (start of growing season)
02		Fungicide sprayer		Once (start of growing season)
03		Weedicide sprayer		Once (start of growing season)
04		Weedicide sprayer		Once (start of growing season)
05		Dry chemical scales		Once (start of growing season)
06		Dry chemical scales		Once (start of growing season)