Asia-Pacific Economic Cooperation

Dialogue on Risk Management in Wine Trade

5-6 November, 2012 - Auckland, New Zealand

Risk Assessment & Management

Labelling & Bottling Risk

Ensuring Quality

There are accepted resources that provide a framework for quality management systems and food quality

QUALITY	
• National Legal Requirements • *Codex Alimentarius* • GMP (Good Manufacturing Practice)	• ISO 9001 • British Retail Consortium (BRC) • International Food Standard (IFS)

Controlling the Risk

Most of the above, and others approaches, have a focus on risk

FOOD SAFETY	
• National Legal Requirements • *Codex Alimentarius* • GMP • HACCP	• BRC • ISO 22000 • Food Safety System Certification (FSSC 22000) • (IFS) • Safe Quality Food (SQF) 2000

System	Description
ISO 9001	Quality management system. Satisfaction and avoidance of legal action. International recognition
BRC (British Retail Consortium)	Food quality, legality and safety . Control of known food hazards and risks as for HACCP, as well as quality and legality. Required by most British and other international retailers. Global Food Safety Initiative (GFSI) approved

System	Description
IFS (International Food Standard)	Food safety, quality and legality. Control of known food hazards and risks as for HACCP, quality and legality. Required by most German, French and other international retailers. International recognition (GFSI approved)
HACCP (Hazard Analysis Critical Control Point)	Ensures safe food production. Physical risks (glass breakage), chemical risks (traceability of additives, allergens) and microbiological risks are addressed on a preventive basis. International recognition

System	Description
FSSC 22000	Food safety and legality. As for ISO 22000, with specific attention to pre-requistes such as GMP, as implemented by Publicly Available Specification PAS 220. GFSI approved
ISO 22000	Food safety and legality. Control of known food hazards and risks as for HACCP and legality. International recognition (Not GFSI approved without PAS 220)
SQF	Food safety, quality and legality. Control of known food hazards and risks as for HACCP, quality and legality. Required by most American and Australian retailers. (Level 2 GFSI approved)

Many common features

- **Flowchart analysis**, from the reception of raw materials to the delivery of the end product.
- **Identification** of potential risks or hazards linked to the production processes at each stage.
- **Identification** of the points, procedures and operational stages that can be kept under control, in order to remove threats or minimize their emergence (Critical Control Points, CCPs).
- **Establish** critical limits that must be complied with in order to make sure that each CCP is under control.

Many common features

- **Surveillance** system to ensure control over CCPs, by means of programmed tests and observations.
- **Corrective** action which when the surveillance of a specific CCP indicates that the latter is not under control.
- **Recording** system, where procedures and data related to the above-mentioned principles will be stored.
- Additionally - establishment of general norms of for manufacturing, hygiene and staff practices, and standard operating procedures.

Embodied in approved management procedures

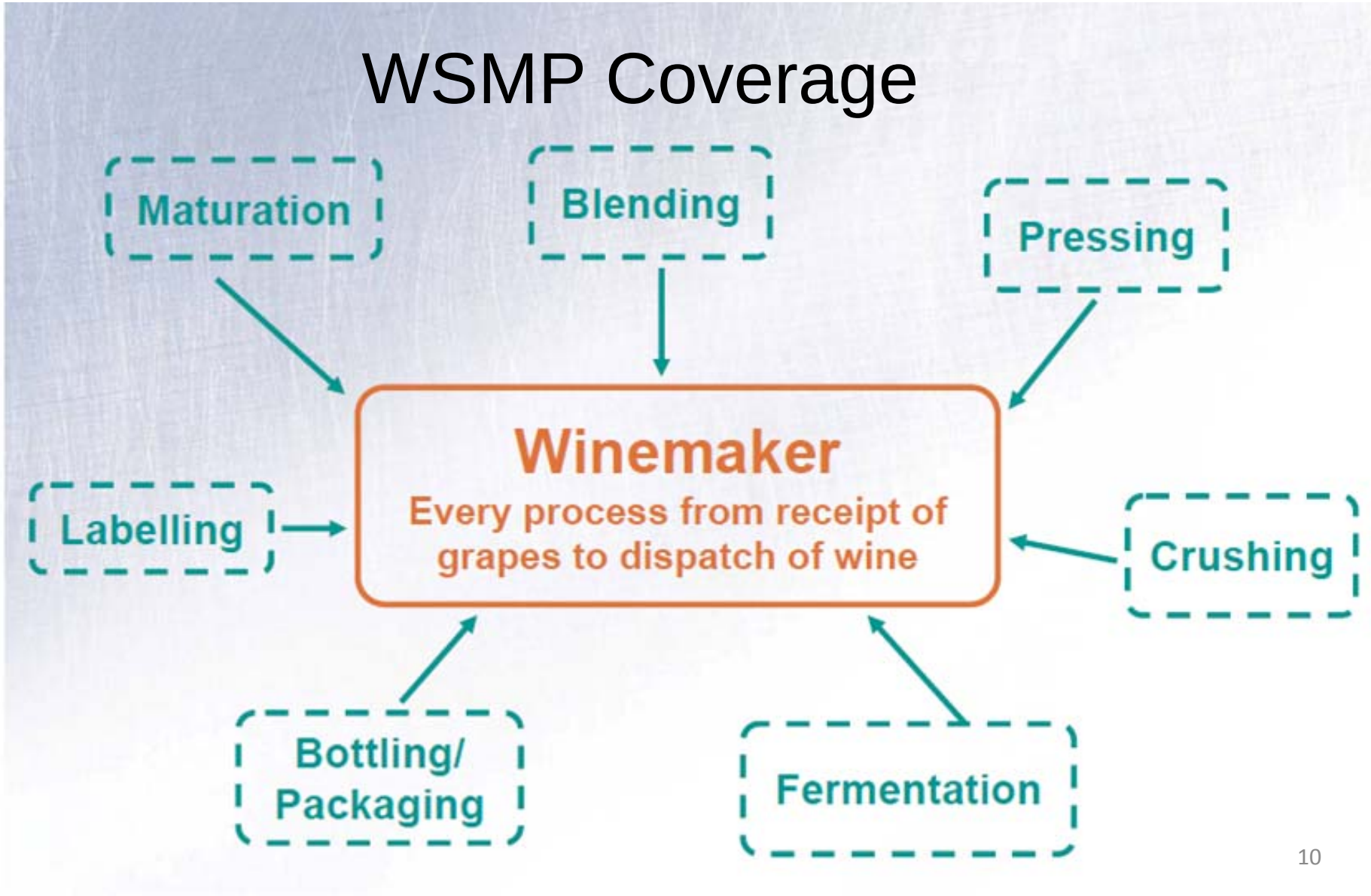
In New Zealand

Wine Standards Management Plan WSMP

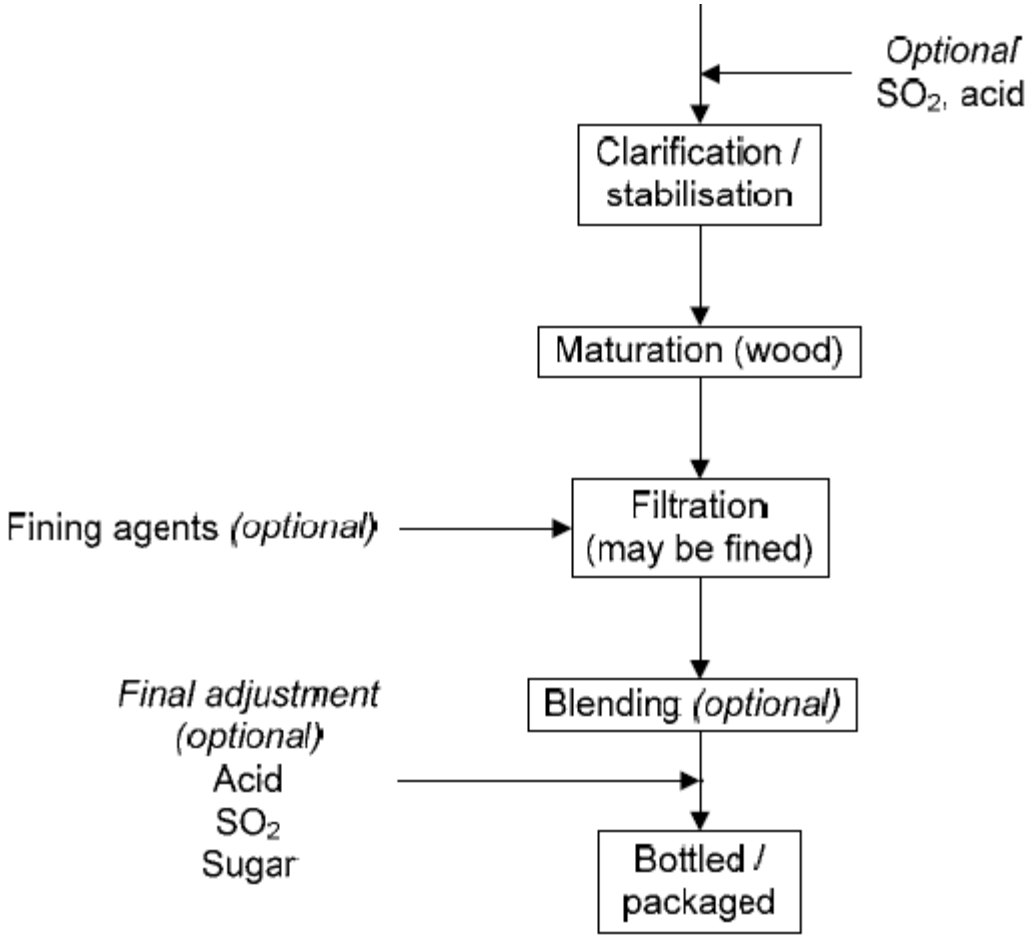
An approved, records based, audited programme based on HACCP analysis and documented procedures to demonstrate compliance

Assessment, elimination and control

WSMP Coverage



- Bottling/ packaging is part of the flow sheet in the HACCP analysis



Generic HACCP Application: Production of Grape Wine

3. Hazard Identification Associated with Inputs

Table 1: Hazard Identification

Inputs	Description/specification	Biological hazard (B)	Chemical hazard (C)	Physical hazard (P)
New glass bottles	Company specification	None	None	None
Used glass bottles[7]	Company specification (e.g. if the bottle had been reused to contain chemicals)	Bacterial pathogens		Foreign objects (e.g. glass, metal)
Plastic wine bags or containers, corks, caps	Suitable for food use	None	None	None
Labels, metal foil, plastic cover, cases	Company specification	None	None	None

4. Hazard Analysis and CCP Determination for the Production of Wine

Table 2: Hazard Analysis and CCP Determination

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and then answer Q2. If no, consider hazard at next step.	Q2. Is this step a CCP?
15. Filling / Bottling	Wine	None			
	Bottles (i.e. rinsed new bottles; cleaned and sanitised reused bottles)	Glass fragments	Incorrect filler operation can result in breakage/chipping	Yes- correct equipment set-up, equipment maintenance, routine observation during filling, proper breakage procedures	No
16. Corking/capping	Bottled/packaged wine	None			
	Cork or plastic caps	None			
17. Labelling	Bottled/packaged wine	None			
	Labels	None		Sulphite declaration Allergen declaration	No

Bottling & Labelling Process

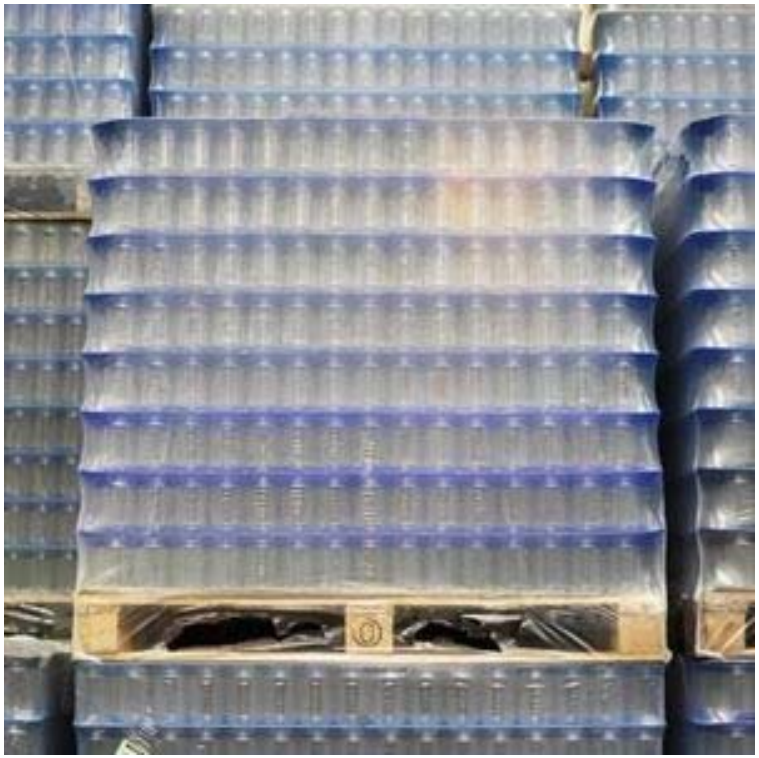
- Pre bottling wine status
- Depalletising
- Rinsing
- Filling
- Corking/capping
- Labelling

Possible risks - Wine Ready for Bottling

Stage	Possible risk
Wine status relative to relevant regulations and human health	Residues of agricultural chemicals, sulfur dioxide, additives such as preservatives, allergens from fining agents such as some animal proteins and derivatives.

Possible risks - Bottle Storage

Stage	Possible risk
Storage	Contamination by foreign objects, matter, insects, sabotage



Possible risks – Depalletising

Stage	Possible risk
Depalletising	- Bottle breakage and glass fragments - Contamination by foreign objects, material

Possible risks - Rinsing

Stage	Possible risk
Rinsing	- Glass fragments - Contamination by foreign objects, matter

Possible risks – Bottle Filling

Stage	Possible risk
Filling	- Glass fragments due to breakage - Microbiological contamination due to inefficient sanitization

Possible risks - Closing

Stage	Possible risk
Corking/capping	- Glass fragments due to breakage - Contamination by foreign objects

Possible risks - Labelling

Stage	Possible risk
Labelling	Incorrect label statements on preservatives, antioxidants, fining agents (allergens) and missing required health advisories – alcohol content, pregnancy, standard drinks

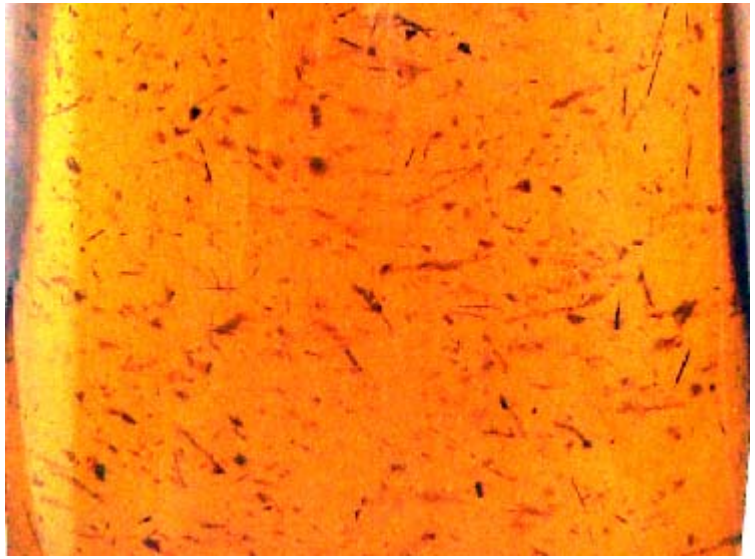
Addressing the main risks in bottling wine

Pre Bottling	**Residues of agricultural Chemicals, Sulphur dioxide, additives (e.g. preservatives, acid), allergens from fining agents with animal protein derivatives.**

Pre and post bottling samples are checked before release
Require approved grape spray programs

Addressing the main risks in bottling wine

Pre Bottling	Bottle cleanliness, freedom from dust, dirt, insects, glass fragments, sabotage
Use only new bottles, securely stored undercover	



How address main risks in bottling wine

Rinsing	**- Glass fragments** **- Contamination with foreign objects**

Certified glass containers,
Correct set up and operation of the depalletiser
Preventive maintenance of the rinser
Adequate water pressure to the rinser,
Visual checks and random inspections of the entire line
Minimise and cover the bottling line from rinser to closure machinery

How to address main risks in bottling wine

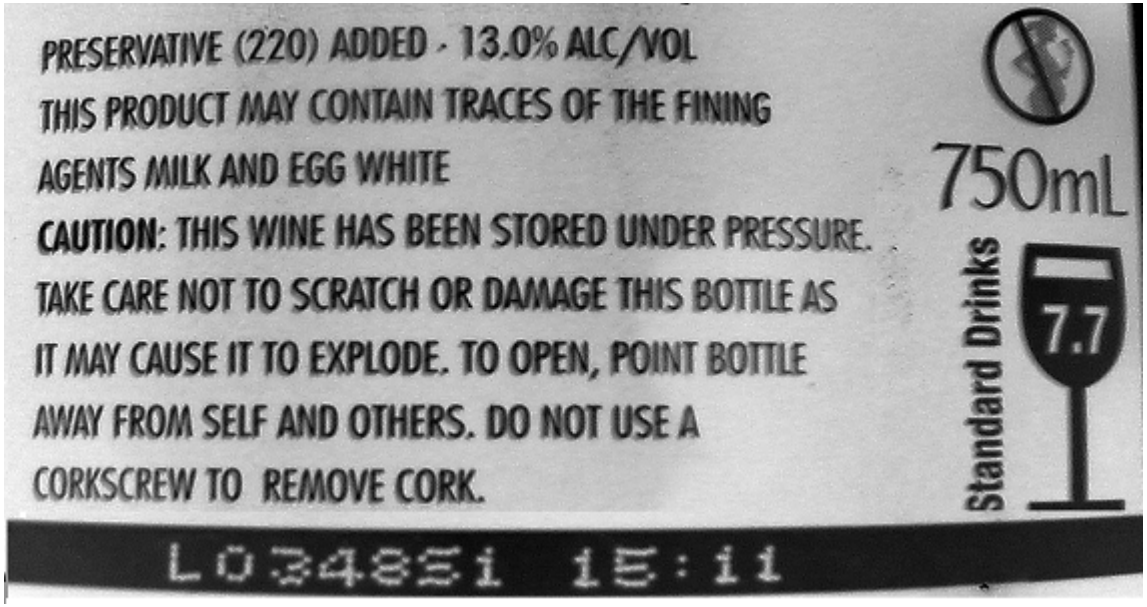
Filling	- **Glass fragments due to breakage** - **Microbiological contamination due to inefficient sanitization**
Follow protocols for bottling line clean-up after any breakage Establish and follow bottling line sterilisation protocols, including filter integrity testing, prior to start-up, during operation and between stoppages	

How to address main risks in bottling wine

Closing	- Foreign matter from closures and closure hopper - Microbioloical contamination
Buy closures from certified sources in sealed packages Open only as needed Cover closure hopper in closure machine Only use complete closure packages Minimise and cover packaging line conveyor between filling and closing machines Operator training Setup control and checklists	

Possible risks - Labelling

Stage	Possible risk
Labelling	Sulfite declaration Allergen declaration Health advisories – alcohol content, pregnancy, pressure and opening

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