



# Generic RMP

Slaughter, Dressing, Cooling and  
Boning of Sheep

# Prelims

Draft

July 2004

## Table of Contents

<b>Generic RMP .....</b>	<b>1</b>
<b>Prelims .....</b>	<b>2</b>
Disclaimer .....	3
<b>1 Introduction.....</b>	<b>1.1</b>
1.1 Purpose of This Document.....	1.1
1.2 Summary of Changes .....	1.1
1.3 Contents of This Generic RMP .....	1.5
<b>2 Generic Risk Management Programme .....</b>	<b>2.1</b>
2.1 Operator, Business and RMP Identification .....	2.1
2.2 Management Authorities and Responsibilities .....	2.1
2.3 Scope of the RMP .....	2.2
2.4 Product Description .....	2.4
2.5 Process Description .....	2.6
2.6 Good Manufacturing Practice (Supporting Systems).....	2.9
2.7 Hazard Analysis and CCP Determination .....	2.11
2.8 Application of Other HACCP Principles When a CCP Is Identified. ....	2.22
2.9 Identification and Control of Risks To Wholesomeness .....	2.25
2.10 Identification and Control of Risks from False or Misleading Labelling.....	2.26
2.11 Operator Verification .....	2.27
2.12 Confirmation of Validity of the RMP .....	2.28

## Disclaimer

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### ***Website***

A copy of this document can be found at <http://www.nzfsa.govt.nz/animalproducts.index.htm>

# 1 Introduction

## 1.1 Purpose of This Document

The Animal Products Act 1999 requires primary processors, including those involved in the slaughter and dressing of farmed mammals, to operate under a risk management programme (RMP). This generic RMP has been produced by the New Zealand Food Safety Authority, in consultation with an industry working group, to assist sheep and lamb processors in the development of their RMP. It shows how HACCP principles can be applied and how RMP components could be written for a sheep and lamb processing operation. It is emphasised that this generic RMP is not intended to represent the outcome of a complete RMP. Individual premises must customise their RMP to their specific products, processes and premises.

This generic RMP has been developed based on New Zealand requirements only. Exporters must ensure that they meet overseas market access requirements relevant to their product and process. In particular, exporters must be aware of requirements that relate to their HACCP plan (e.g. US requirement for critical control points addressing the zero faecal tolerance criteria for carcasses).

The application of HACCP principles in this generic RMP has been based on scientific information, industry surveys and industry data provided in the Technical Annex to this generic RMP.

## 1.2 Summary of Changes

This generic RMP is a revision of the *Generic HACCP Plan for the Slaughter and Inverted Dressing of Sheep and Lambs* and the *Generic HACCP Plan for Cooling and Boning of Sheep Meat*. They have been updated in content and format to comply with the requirements of the Animal Products Act 1999 and associated legislation, particularly the Animal Products (Risk Management Programme Specifications) Notice 2003. The key changes are summarised below.

### a. Change from a generic HACCP plan to a generic RMP.

To assist processors develop their RMP, the generic HACCP plans have been merged and converted to a generic RMP. RMP components that are not covered in a HACCP plan (e.g.

management authorities and responsibilities, identification of risk factors associated with wholesomeness and false or misleading labelling) are included in this document.

#### **b. Change in scope**

The scope of this generic RMP has been extended to include products for animal consumption. Aside from hazards to human health, other risk factors such as hazards to animal health, risks from false or misleading labeling, and risks to wholesomeness are considered in this generic RMP.

#### **c. Removal of product outcomes**

Product outcomes are no longer required and have been removed in this generic RMP.

The product outcomes identified in the 'old' generic HACCP plans for slaughter and dressing of farmed mammals were:

- Specified microbiological outcome, e.g. *E. coli* - level that meets National Microbiological Targets for carcasses, primal cuts and bulk meat.
- No grossly detectable abnormalities on all carcasses.
- All chemical "suspect" lines of livestock that are presented for slaughter are identified, for subsequent regulatory action.

Although product outcomes will be 'dropped' from existing RMPs, these requirements are still expected to be met by the operator. The first outcome (i.e. *E. coli*) is addressed by the NMD programme. The second and third outcomes are presently controlled under existing national programmes (i.e. ante- and post-mortem examination and the National Residue Monitoring and Surveillance programme).

#### **d. Introduction of regulatory limits and important product characteristics**

Regulatory limits and important product characteristics have been introduced in the RMP Specifications 2003.

Regulatory limits and important product characteristics are measurable criteria that together with Good Manufacturing Practice (GMP) requirements define the product's fitness for intended purpose. The effectiveness of the RMP can be confirmed against these criteria.

## Regulatory limits

Regulatory limits are limits that are essential to be met for food safety. They will be established by the regulator. They may be based on quantitative risk assessments or on best available science.

At present, no regulatory limit has been defined for raw meat products, including sheep meat.

## Important product characteristics

Important product characteristics are measurable criteria that contribute to the safety and suitability of the product, and have not been defined as regulatory limits. They may be established by legislation [e.g. Animal Products (Specifications for Products Intended for Human Consumption) Notice, Food Standards Code] or by the operator. Examples of possible important product characteristics are:

- intrinsic parameters of the final product (e.g. pH, moisture content or water activity)
- microbiological criteria related to food safety (where regulatory limits are not yet established);
- levels of physical hazards (e.g. metal, bone);
- levels of chemical hazards (e.g. nitrite and sulphite levels); and
- parameters related to wholesomeness (e.g. level of defects, indicators of spoilage).

Any important product characteristic defined by the operator should be included in their RMP.

For raw products that have not undergone any further processing or manufacturing process (e.g. raw meat cuts and trimmings), it is expected that any identified important products characteristic will be met by applying controls under GMP.

No important product characteristic has been defined in this generic RMP.

### e. Stronger focus on Good Manufacturing Practice (GMP)

The HACCP approach applied in this generic RMP is based on the expectation that supporting systems covering GMP have been developed and documented prior to the

application of HACCP principles. The role of control measures under GMP and the need for documented supporting systems have been given stronger focus in this generic RMP.

A step-by-step hazard analysis is not required to be applied to supporting systems by the operator.

#### **f. Change in Critical Control Point determination**

The approach to Critical Control Point (CCP) determination has been simplified. The series of questions comprising the CCP determination table has been changed consistent with the introduction of regulatory limits and important product characteristics, and the stronger focus on GMP control measures for addressing hazards. Only those steps that are essential for food safety, as defined by a regulatory limit, are expected to be identified as CCPs for raw products that have not undergone any further processing (e.g. raw meat cuts and trimmings).

As a consequence of the increased focus on GMP controls and the absence of regulatory limits for slaughter and dressing of sheep and lambs, no CCP has been identified in this generic RMP. Any CCP that has been identified in existing RMPs should be reviewed by the operator considering the new approach to CCP determination and the removal of product outcomes.

#### **Other CCPs that may be identified by the operator**

The operator may need to identify a CCP for reasons other than having to meet a regulatory limit. The CCP may be required to satisfy an overseas market access requirement or a customer requirement. These types of CCPs must be clearly identified as such, to ensure the appropriate external verification of these CCPs. The regulator will verify the effectiveness of any market access CCP against the relevant Overseas Market Access Requirements (OMARs).

#### **g. Addition of summary of operator verification activities**

A summary of company verification activities has been added to emphasise its importance and to give a clearer picture of the various activities that usually form part of an operator's verification.

#### **h. Change to confirmation of validity of the RMP**

The 'old' validation section has been revised in line with proposed changes in New Zealand's food regulatory programme regarding the use of the term "validation" and the type of activities that are expected to be undertaken by an operator prior to evaluation and

registration of the RMP to confirm the validity of the RMP. The approach for confirmation of validity has been simplified and provides more flexibility in terms of the types of evidence that can be used to demonstrate the effectiveness of the RMP.

### 1.3 Contents of This Generic RMP

Table 1 summarises the components of an RMP and indicates where these components are covered in this generic RMP. For practical reasons, not all requirements regarding the documentation of the RMP are covered in this generic RMP. The operator must ensure that they are familiar and comply with all relevant legislative requirements.

A brief instruction or explanation about the RMP component is given for each section, followed by a worked example in a tabular form, when appropriate to the scope of this RMP. Operators do not need to follow the format used in this document but it is important that all required information is documented clearly in their RMP.

Supporting systems must be documented and form part of an RMP. Examples of these are not included in this document. Guidance on the documentation of supporting systems is given in section 2.6 of this generic RMP.

A comprehensive discussion of the RMP requirements and components is given in the Draft *Risk Management Programme Manual* (published in 2004) which will be available on the NZFSA website. A list of sources of information relevant to the scope of this generic RMP is provided in the [Draft Road Map Code of Practice: Farmed and Killed Mammals](#).

**Table 1: RMP Components**

<b>Components</b>	<b>Section of this generic RMP <sup>1</sup></b>
Operator, Business and RMP identification	Section 2.1
List of RMP documents	A list of the documents comprising the RMP, with their date and version, must be included in the RMP. An example is not shown in this generic RMP.
Management authorities and responsibilities	Section 2.2
Scope of the RMP	Section 2.3
Product description	Section 2.4
Process description	Section 2.5
Good Manufacturing Practice (Supporting systems)	Section 2.6
Application of HACCP (identification, analysis and control of hazards to human or animal health)	Sections 2.7 and 2.8
Identification and control of other risk factors (wholesomeness, false or misleading labelling)	Sections 2.9 and 2.10
Identification and competency of responsible persons	This is expected to be documented in relevant sections of the RMP. Records of competencies are expected to be documented in a supporting system. An example is not shown in this generic RMP.
Recall procedures	This is expected to be documented in a supporting system. An example is not shown in this generic RMP.
Corrective action procedures for unforeseen circumstances	This is expected to be documented in a supporting system. An example is not shown in this generic RMP.
Notification requirements	This is expected to be documented in a supporting system. An example is not shown in this generic RMP.
Operator verification	Section 2.11
Provision for external verification	RMP Specification 2003, Clause 15 should be copied or referenced in the RMP.
Document control and requirements for records	This is expected to be documented in a supporting system. An example is not shown in this generic RMP.
Confirmation of validity of the RMP	Section 2.12

1. Refer to the Draft Risk Management Programme Manual (published in 2004) for further guidance on what is expected to be documented for each component.

## 2 Generic Risk Management Programme

### 2.1 Operator, Business and RMP Identification

The name and address of the business operator must be documented in the RMP. The unique business identifier and the RMP identifier should also be included in this section of the RMP to assist in the traceability of documents.

#### Form 1: Operator, business and RMP identification

Information required	Details
Business identifier	<i>e.g. ME81, PET123</i>
RMP no.	<i>e.g. 01, 02</i>
Name of the operator	<i>Legal name of the business operator (i.e. the owner of the business)</i>
Address of the operator	<i>Business address of the operator (e.g. postal address of head office)</i>
Electronic address of the operator	<i>May be an email address and/or web site address</i>
Name of the business	<i>The registered company name, if different from the operator</i>
Physical address of the premises	<i>Location of the premises, if different from the operator's address</i>

### 2.2 Management Authorities and Responsibilities

The operator must document details of the person who is responsible for the day-to-day management of the RMP. It is recommended that a deputy be designated who can take over from the day-to-day manager when necessary.

#### Form 2: Management authorities and responsibilities

Authority/responsibility	Details
Day-to-day manager	<i>Give name or, preferably, give position or designation</i>
Deputy for day-to-day manager	<i>Give name or, preferably, give position or designation</i>

### 2.3 Scope of the RMP

The operator must clearly define the scope of the RMP.

#### Form 3: Scope of the RMP

Elements	Description/Details
Physical boundaries	<p>Physical boundaries indicated on site plan given in Appendix xx.</p> <p><i>Attach an accurate site plan. Ensure that amenities and external areas that may be a source of hazards and other risk factors are considered when establishing the physical boundaries. The site plan should also show any areas within the boundaries that are excluded from the RMP.</i></p>
Risk factors covered by the RMP	<p>Risk factors associated with:</p> <ul style="list-style-type: none"> <li>• Human health for products intended for human consumption)</li> <li>• Animal health (for products intended for animal consumption)</li> <li>• Wholesomeness</li> <li>• False or misleading labelling</li> </ul>
Animal material being processed	Live sheep and lambs
Products <sup>1, 2</sup>	<ul style="list-style-type: none"> <li>• Carcasses</li> <li>• Boneless and bone-in cuts</li> <li>• Trimmings</li> <li>• Offal for human consumption (green and red offal)</li> <li>• Green runners</li> <li>• Products for petfood (e.g. offal, trimmings)</li> <li>• Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock)</li> <li>• Animal material for pharmaceutical use (e.g. glands, gall bladder, foetal blood, foetuses)</li> </ul>

Elements	Description/Details
Process <sup>1</sup>	<p>From receipt of the live animals to loadout of carcasses and packed products.</p> <p>Principal processing categories:</p> <ul style="list-style-type: none"> <li>• Slaughter and dressing</li> <li>• Boning/cutting</li> <li>• Refrigeration</li> <li>• Collection</li> </ul>
Exclusions	<p><i>Identify those materials, products or activities excluded from the RMP, and the alternative regulatory regime they are under.</i> <sup>3</sup></p>

1. The products and processes covered by this generic RMP are examples only based on a typical New Zealand sheep processing operation. The operator must ensure that their RMP accurately reflects their own products and processes.
2. Products should be listed either individually or as product groups with similar characteristics, processes and intended purpose. The list should be as specific as possible, but at the same time should allow flexibility in terms of other products of the same group that can be processed without the need for a significant amendment.
3. If there is any animal material or product processed within the physical boundaries of the RMP but are excluded from the scope of the RMP, the operator must identify the material or product, the alternative regulatory regime that they are under (e.g. Food Act), and explain how the interfaces between regimes are managed. The operator must also document authorities and responsibilities, and the management of interfaces in relation to any activity undertaken by another person within the physical boundaries of the RMP.

## 2.4 Product Description

The operator must describe the animal products covered by the RMP, either individually; or as product groups with similar characteristics, processes and intended purpose. The product description must include the intended use and consumer, any regulatory limit relevant to the product, and any important product characteristics. Other information such as company specifications for packaging, labelling, and shelf life may be included under the product description but these are not considered as important product characteristics.

No regulatory limit or important characteristic has been defined in this generic RMP.

### Form 4: Product descriptions and intended purpose

Product name	Product description	Intended use of product <sup>1</sup> produced under the RMP	Intended consumer and use of final product <sup>2</sup>	
			Consumer	Use
Carcasses, cuts and trimmings for human consumption	<ul style="list-style-type: none"> <li>Passed ante- and post-mortem examination</li> <li>Chilled or frozen as per regulatory and company specifications.</li> <li>Packed and labelled as per regulatory and company specification.</li> </ul> <p>Refer to Doc. xx for specifications.</p>	Further processing into manufactured products, retail products, food service items	General public	Cooked
Offal for human consumption	<ul style="list-style-type: none"> <li>Passed post-mortem examination</li> <li>Chilled or frozen as per company specification.</li> <li>Packed and labelled as per regulatory and company specification.</li> </ul> <p>Refer to Doc. xx for specifications.</p>	Further processing into manufactured products, retail products, food service items	General public	Cooked

Product name	Product description	Intended use of product <sup>1</sup> produced under the RMP	Intended consumer and use of final product <sup>2</sup>	
			Consumer	Use
Green runners for human consumption	<ul style="list-style-type: none"> <li>Obtained from animals that have passed ante- and post-mortem examination</li> <li>Packed in casks with metabisulphite</li> </ul> <p>Refer to Doc. Xx for specifications.</p>	Further processing into casings	General public	Cooked (i.e. as sausage casings)
Products for petfood (e.g. offal, trimmings)	<ul style="list-style-type: none"> <li>Passed as fit for animal consumption</li> <li>Packed and labelled as per regulatory and company specification.</li> </ul> <p>Refer to Doc. xx for specifications.</p>	Further processing into petfood	Pets	Raw or cooked
Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock)	<ul style="list-style-type: none"> <li>Labelled as per regulatory and company specifications.</li> </ul> <p>Refer Doc. xx for specifications.</p>	Rendering	<ul style="list-style-type: none"> <li>Animals</li> <li>Industrial use</li> </ul>	<ul style="list-style-type: none"> <li>Ingredient in petfood &amp; animal feed</li> <li>Fertiliser</li> </ul>
Animal material for pharmaceutical use for human consumption	<ul style="list-style-type: none"> <li>Obtained from animals that have passed ante and post-mortem examination as fit for human consumption</li> <li>Labelled as per regulatory and company specifications.</li> </ul> <p>Refer Doc. xx for specifications.</p>	Further processing into pharmaceutical products	General public	Ingredient in pharmaceutical products
Animal material for pharmaceutical use for animal consumption	<ul style="list-style-type: none"> <li>Passed as fit for animal consumption</li> <li>Labelled as per regulatory and company specifications.</li> </ul> <p>Refer Doc. xx for specifications.</p>	Further processing into pharmaceutical products	Animals	Ingredient in pharmaceutical products (e.g. veterinary medicine)

1. "Product" as used in this column refers to the product in the form that it is dispatched from the premises.
2. "Final product" refers to the form of the product as it would be sold to or consumed by the consumer (i.e. after further processing by another company). In some cases, the operator may not know how the "final product" will be used after further processing but, as a minimum, they must be able to establish whether it is intended for human or animal consumption.

## 2.5 Process Description

The RMP must accurately describe the processes that it covers. This is usually done using process flow diagrams. There is no prescribed format to be used but the process flow should sequentially set out all steps in the process together with relevant inputs and outputs. The process flow(s) must show the full extent of the process for all products covered by the RMP (i.e. up to loadout of each product or product groups, including any rework or recycling steps).

It should be noted that the examples given in this generic RMP are simplified presentations of the key steps based on a generic process. Only the main chain and processing of red offal and green runners for human consumption are shown as examples.

### Form 5A: Process flow diagram for slaughter, dressing, cooling and boning

Inputs <sup>1</sup>	Process steps	Outputs <sup>2</sup>
Live animals →	1. Receiving ↓ 2. Washing ↓ 3. Holding in pens ↓ 4. Ante-mortem examination ↓                    ↓ Suspects ↓                    ↓ 5. Stunning ↓ 6. Sticking ↓ 7. Forequarter workup ↓ 8. Hindquarter workup ↓ 9. Rip down ↓ 10. Pelt removal ↓ 11. Fore trotter removal ↓                    ↓ 12a. Trimming ↓ 12b. Pre- evisceration wash ↓ 13. Head removal	→ Dead stock for rendering  → Materials for petfood or rendering     → Blood for rendering       → Pelt  → Fore trotter for rendering       → Head, tongue



**Form 5B: Process flow diagram for red offal for human consumption**

Inputs	Process steps	Outputs
Red offal from evisceration step in Form 5A →	1. Cold water flume to offal room ↓	
	2. Inspection and trimming of defects ↓	→ Defect trimmings to petfood or rendering
Packaging materials, bins →	3. Packing ↓	
Ice →	4. Cooling (ice or freezer) ↓	→ Iced offal in bins
	5. Blast freezing/chilling ↓	
	6. Storage ↓	
	7. Loadout	→ Packed chilled/frozen cartoned offal

**Form 5C: Process flow diagram for preparation of green runners**

Inputs	Process steps	Outputs
Gut sets from evisceration step in Form 5A →	1. Receiving guts from slaughter floor ↓	
	2. Pulling of intestines ↓	
	3. Removal of contents ↓	→ Gut contents to waste
Chilled water, metabisulphite →	4. Packing in casks ↓	
	5. Dispatch	→ Green runners

## 2.6 Good Manufacturing Practice (Supporting Systems)

Prior to the application of HACCP principles to the process, all relevant supporting systems (also known as prerequisite programmes, good hygienic practices) must be documented. These supporting systems must comply with all relevant regulatory requirements, particularly the Animal Product Regulations 2000, the Animal Products (Specifications for Products Intended for Human Consumption) Notice 2003, and Industry Standard 7 for products not for human consumption. Other Industry Standards, particularly IS 2, 3, 5 and 6, provide guidance on supporting systems relevant to the scope of this RMP.

Supporting systems must address the following activities and procedures (this list is not exhaustive):

- hygienic design and construction;
- potable water quality;
- sanitation and cleanup procedures for processing areas, facilities and equipment;
- hygienic processing procedures (hygienic techniques and procedures for dressing, cutting, boning, collection of animal material; cleaning and sterilisation of equipment, dropped meat);
- personnel hygiene;
- control of chemicals;
- pest control;
- waste management;
- repairs and maintenance of equipment;
- food contact materials (specifications, handling and storage);
- reception of animals (presentation status, condition of stock, supplier declarations);
- handling and disposition of detained and non-conforming products;
- refrigeration management;
- calibration of equipment and measuring devices;

- inventory control;
- document control (including procedures for amendments);
- product sampling and testing procedures;
- product identification and traceability;
- recall of products;
- training of personnel;
- procedures for notifying the Director-General about new hazards, and the verifying agency about certain operational matters;
- corrective action procedures for unforeseen circumstances;
- National Microbiological Database (NMD) procedures;
- ante- and post-mortem examination procedures (when these activities are done by the operator).

It is recommended that the documented supporting systems include the following information:

- purpose;
- scope;
- authorities and responsibilities;
- materials and equipment, when applicable;
- procedures (including control, monitoring, corrective action and operator verification);
- recording/reporting;
- references to other documents within the RMP, when applicable.

## 2.7 Hazard Analysis and CCP Determination

### 2.7.1 Identification of hazards from inputs

The operator must identify any hazards associated with each input considering any supplier agreements and raw material specifications.

#### Form 6: Hazard identification

Inputs	Description/specification <sup>1</sup>	Biological hazard (B)	Chemical hazard (C)	Physical hazard (P)
Live animal	Complies with regulatory requirements for animals presented for slaughter.	Bacterial pathogens associated with the faeces, ingesta and dirt from the gastro intestinal tract and the fleece/pelt, e.g. <i>Salmonella</i> spp., <i>Campylobacter jejuni</i> , <i>Clostridium</i> spp.  Bacterial pathogens associated with grossly-detectable abnormalities (i.e. fever, abscesses), e.g. <i>Salmonella</i> spp. for fever  <i>Toxoplasma gondii</i> in the musculature	Chemical residues , e.g. veterinary medicines, heavy metals	None
Water/ice	Potable water/ice	None	None	None
Branding ink	Suitable for use as food contact material.	None	None	None
Carcass tickets	Suitable for use as food contact material.	None	None	None
Packaging materials	Suitable for use as food contact material.	None	None	None
Metabisulphite (for casings)		None	None	None

1. Agreed specifications and procedures for inputs must be documented in a supporting system.

## 2.7.2 Hazard analysis and critical control point (CCP) determination

The operator must carry out a systematic and thorough hazard analysis and CCP determination for all products and processes covered by the RMP. Form 7 provides a template that can be used by the operator for this activity. Worked examples are given in Form 7a-7c only for the main chain and the processing of red offal and green runners for human consumption.

### Form 7: Template for hazard analysis and CCP determination for raw products that have not undergone further processing

Process step	Inputs	Hazard reasonably likely to occur <sup>1</sup> on or in the product at this step	Justification	Q1. Is there a control measure(s) <sup>2</sup> for the hazard at this step?  If yes, identify the control measure and then answer Q2.  If no, consider hazard at next step. <sup>3</sup>	Q2. Is the control measure at this step essential <sup>4</sup> to food safety as defined by a regulatory limit? <sup>5</sup>  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.

1. Consider hazards from inputs, hazards carried over in the product from the previous step, and hazards introduced or transferred during the process.
2. A control measure is any action or activity that can be used to prevent, reduce or eliminate a food safety hazard. Consider existing control measures and if these are not adequate, then consider the need for redesign of the process or the implementation of new control measures.  
All identified control measures must be documented in the RMP (e.g. in supporting systems or task instructions) and the relevant supporting system must be referenced in this table.
3. A hazard that is not completely eliminated at a step should be considered at the next step to ensure that the impact of succeeding steps on the existing hazard is considered during the analysis. In particular, bacterial pathogens should be carried over to succeeding steps since there is potential for their growth. Hazards that are unlikely to be adversely affected by succeeding steps in the process (i.e. will not grow or increase), such as chemical residues and parasites, need not be carried over each succeeding step in the hazard analysis table to prevent repetitions. The hazard must be reintroduced at the subsequent step where it is controlled, or be identified as an uncontrolled hazard at the last step.
4. Essential means that control at the particular step is necessary (individually or in combination with other steps) to meet the regulatory limit. If control at that step is lost, then a health risk will occur. The factors that should be considered when determining if control at the particular step is essential include: the degree of hazard

control that is achieved at the step; likelihood of failure; consequence of control failure considering the intended use and consumer (i.e. risk to health). Essential steps will generally include steps that are specifically designed to eliminate or reduce the hazard to acceptable levels. They may also include certain steps that prevent a hazard from increasing to above a limit.

5. The operator may need to identify a CCP for reasons other than having to meet a regulatory limit. The CCP may be required to satisfy an overseas market access requirement or a customer requirement. These types of CCPs must be clearly identified as such, to ensure the appropriate external verification of these CCPs. The regulator will verify the effectiveness of any market access CCP against the relevant OMAR requirements.

**A review should be done after completing the hazard analysis and CCP determination considering the following:**

- Are the identified CCPs essential to comply with the regulatory limit(s)?
- Are the critical limits appropriate and achievable? Can the critical limits be monitored effectively?
- Are all the identified hazards adequately controlled by GMP and/or a CCP(s), or by controls outside the HACCP plan (e.g. regulated control scheme)? If not, does the process need to be modified or are additional control measures needed?
- Are there any uncontrolled hazards? Is the uncontrolled hazard required by legislation to be controlled to a specified level? Does the operator need to consider redesigning the process/product? Does the operator need to inform the further processor, retailer or consumer about the uncontrolled hazard so that food safety can be assured prior to consumption of the product (e.g. by providing feedback to suppliers; or cooking instructions, or product specifications to customers / consumers).

**Form 7A: Hazard analysis and CCP determination for carcasses, cuts and trimmings**

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification <sup>1</sup>	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 the control measure at this step essential to food safety as defined by a regulatory limit?  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.
1. Receiving	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Refer to Form 6	Controlled under the ante- and post-mortem system <sup>2</sup>	No	
		B – <i>Toxoplasma gondii</i>	Refer to Form 6	No control at this step. Controlled by freezing at step 25.	No	
		C – Chemical residues	Refer to Form 6	Controlled under the national residue programme. <sup>3</sup> Supplier declarations.	No	
2. Washing	Live animal	None				
3. Holding in pens	Live animal	None				
4. Ante-mortem examination	Live animal	None				
5. Stunning	Live animal	None				
6. Sticking	Live animal	B – enteric pathogens	Micro contamination of the carcass from the fleece/pelt is likely to occur during sticking.	Yes – GMP, correct sticking technique will minimise contamination.  Refer to Supporting Sys. xx.	No	
7. Forequarter workup	Carcass/head/offal	B – enteric pathogens	Micro contamination of the carcass from the fleece/pelt is likely to occur when making the opening cuts and during flaying.	Yes – GMP, correct flaying techniques and prevention of rollback will minimise contamination.  Refer to Supporting Sys. xx.	No	

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification <sup>1</sup>	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 the control measure at this step essential to food safety as defined by a regulatory limit?  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.
8. Hindquarter workup	Carcass/head/offal	B – enteric pathogens	Micro contamination of the carcass from the fleece/pelt is likely to occur when making the opening cuts and during flaying.	Yes – GMP, correct flaying techniques and prevention of rollback will minimise contamination.  Refer to Supporting Sys. xx.	No	
9. Ripdown	Carcass/head/offal	B – enteric pathogens	Micro contamination of the carcass from the fleece/pelt is likely to occur during ripdown.	Yes – GMP, correct ripdown techniques and prevention of rollback will minimise contamination.  Refer to Supporting Sys. xx.	No	
10. Pelt removal	Carcass/head/offal	B – enteric pathogens	Micro contamination of the carcass from the fleece/pelt is likely to occur during removal of the pelt.	Yes – GMP, correct pelting techniques will minimise contamination.  Refer to Supporting Sys. xx.	No	
11. Fore trotter removal	Carcass/head/offal	B – enteric pathogens	Micro carried over from the previous step	No		
12a. Trimming	Carcass/head/offal	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, hygienic trimming will remove any visible faecal contamination and reduce micro contamination on the carcass.  Refer to Supporting Sys. xx.	No	
12b. Pre-evisceration wash	Carcass/head/offal	B – enteric pathogens	Micro carried over from previous step	No		
13. Head removal	Carcass/head/offal	B – enteric pathogens	Micro carried over from the previous step	No		

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification <sup>1</sup>	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 the control measure at this step essential to food safety as defined by a regulatory limit?  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.
14. Evisceration	Carcass/offal	B- enteric pathogens	Micro contamination from the GIT can occur during evisceration.	Yes – GMP, hygienic techniques during freeing and dropping of the bung and prevention of puncturing the GIT will minimise contamination.  Refer to Supporting Sys. xx.	No	
15/16. Post-mortem/retain/re-examination	Carcass	B – enteric pathogens	Micro carried over from the previous step.	Yes – GMP, hygienic trimming will remove any visible faecal contamination and reduce micro contamination on affected parts of the carcass.  Refer to Supporting Sys. xx.	No	
17. Grading	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
18. Carcass wash	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
19. Electrical stimulation	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
20. Cooling	Carcass	B – enteric pathogens	Micro carried over from the previous step.  Growth of mesophiles can occur if there is cooling failure.	Yes – GMP, effective cooling will prevent the growth of mesophiles.  Refer to Supporting Sys. xx.	No	
21. Pre-trim	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification <sup>1</sup>	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 the control measure at this step essential to food safety as defined by a regulatory limit?  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.
22. Cutting & boning	Carcass	B – enteric pathogens	Micro carried over from the previous step.  Growth of mesophiles can occur if there is temperature control failure.	Yes – GMP, hygienic boning techniques will minimise contamination, and temperature control will prevent micro growth.  Refer to Supporting Sys. xx.	No	
		P – bone in boneless product	Bone > 20 mm occasionally occurs in boneless products.	Yes – GMP, correct boning techniques will minimise bone in boneless product.  Refer to Supporting Sys. xx.	No	
23. Packing	Cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
24. Labelling & weighing	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
25. Blast chilling/freezing	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.  Micro growth can occur if there is refrigeration failure.	Yes – GMP, effective refrigeration will prevent micro growth.  Refer to Supporting Sys. xx.	No	
		B- <i>Toxoplasma gondii</i>	Hazard carried over from step 1	Yes for frozen products – freezing to ≤ -12°C will render tissue cysts of <i>T. gondii</i> nonviable. No for chilled products.	No	
26. Aging of chilled meat	Packed chilled cuts	B – enteric pathogens	Micro carried over from the previous step.  Micro growth can occur if there is refrigeration failure.	Yes – GMP, effective refrigeration will prevent micro growth.  Refer to Supporting Sys. xx.	No	

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification <sup>1</sup>	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 the control measure at this step essential to food safety as defined by a regulatory limit?  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.
27. Storage	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.  Micro growth can occur if refrigeration failure occurs.	Yes – GMP, effective refrigeration will prevent micro growth.  Refer to Supporting Sys. xx.	No	
28. Loadout	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.  Micro growth can occur if temp abuse occurs.	Yes – GMP, time/temperature control during loadout will prevent micro growth.  Refer to Supporting Sys. xx.	No	

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.
2. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will not be considered further at subsequent steps in this generic plan. However, if ante-mortem and post-mortem examinations are undertaken by the company (i.e. operator's responsibility), then these steps must be considered during hazard analysis.
3. The control of chemical residues involves effective farming practices and the monitoring of chemical residues under the National Residue Monitoring and Surveillance programme. Sporadic chemical residues at some level will always occur, but results from the programme indicate that residue levels in sheep are generally in compliance with national requirements. Therefore, they will not be considered further at subsequent steps in this generic plan.

**Form 7B: Hazard analysis and CCP determination for red offal for human consumption**

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 the control measure at this step essential to food safety as defined by a regulatory limit?  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.
1. Conveying to offal room	Red offal	B – enteric pathogens	Micro carried over from the evisceration step	Yes – GMP, temperature control will minimise growth of micro. Refer to Supporting Sys. xx.	No	
2. Inspection and trimming of defects	Red offal	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, hygienic handling and trimming techniques will minimise contamination. Refer to Supporting Sys. xx.	No	
3. Packing	Red offal	B – enteric pathogens	Micro carried over from the previous step	No		
	Packaging material	None				
	Bins (cleaned/sanitised)	None				
4. Cooling	Red offal	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, temperature control will minimise growth of micro. Refer to Supporting Sys. xx.	No	
	Ice	None				
5. Blast freezing/chilling	Packed red offal	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, effective refrigeration will prevent micro growth. Refer to Supporting Sys. xx.	No	
6. Storage	Packed red offal	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, effective refrigeration will prevent micro growth. Refer to Supporting Sys. xx.	No	
7. Load out	Packed red offal	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, time/temperature control during loadout will prevent micro growth. Refer to Supporting Sys. xx.	No	

**Form 7C: Hazard analysis and CCP determination for green runners**

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 the control measure at this step essential to food safety as defined by a regulatory limit?  If yes, this step is a CCP.  If no, this step is not a CCP.	CCP no.
1. Receiving gut sets from slaughter floor	Gut sets	B – enteric pathogens	Gut sets are likely to be contaminated with enteric pathogens.	No		
2. Pulling of intestines	Gut sets	B – enteric pathogens	Micro carried over from the previous step	No		
3. Removal of contents	Intestines	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, proper removal of intestinal contents will reduce the micro load. Refer to Supporting System xx.	No	
4. Packing in casks	Green runners	B – enteric pathogens	Micro carried over from the previous step	Yes – GMP, use of metabisulphite will minimise micro growth.  Refer to Supporting System xx.	No	
	Water	None				
	Metabisulphite	None				
5. Dispatch	Green runners	B – enteric pathogens	Micro carried over from the previous step	No		

## 2.8 Application of Other HACCP Principles When a CCP Is Identified

When a CCP is identified, the application of the remaining HACCP principles is required. Although a CCP has not been identified for the processes covered in this generic RMP, guidance is given in this section to assist those operators who may identify a CCP in their process.

The HACCP principles that must be covered include:

- a. critical limits for each CCP;
- b. monitoring procedures for each CCP, including:
  - responsibility for monitoring;
  - what is going to be done;
  - monitoring method, sampling regime;
  - monitoring frequency;
  - how the observations are to be recorded.
- c. corrective action procedures, including:
  - responsibility for taking corrective action;
  - how control is restored at each CCP;
  - how disposition of non-conforming products are managed;
  - action taken to prevent the problem from happening again;
  - escalating response if preventative action fails;
  - how the above actions are to be recorded.
- d. verification procedures, including:
  - responsibility for ongoing operator verification;
  - when ongoing operator verification is to be carried out;
  - how operator verification is to be done;

- what follow-up action is to be taken if non-compliance occurs;
  - how the above activities are recorded.
- e. documentation and record keeping procedures.

A sample form that may be used to summarise this CCP information is given in Form 8.

Verification, and documentation and record keeping procedures for CCPs may be documented together with other verification and record keeping procedures of the RMP (e.g. Form 11).

**Form 8: Example of a CCP summary table**

<b>Process step</b>	<b>Hazard</b>	<b>CCP no.</b>	<b>Critical limits</b>	<b>Monitoring procedures (consider who, what, when and how)</b>	<b>Corrective actions (consider who, what, when and how)</b>	<b>Verification procedures (consider who, what, when and how)</b>	<b>HACCP records</b>

## 2.9 Identification and Control of Risks To Wholesomeness

The RMP must identify the risk factors related to wholesomeness that are reasonably likely to occur for each animal product covered by the RMP. It must also identify the control measures for addressing the risk factors. The control measures must be documented, including procedures for monitoring, corrective action and verification, and records. Only examples for carcasses, cuts and trimmings; red offal; and green runners are shown in Form 9.

### Form 9: Summary of identified risk factors and controls related to wholesomeness

Risk factor	Source or cause of risk factor	Control measure
<b>Carcasses, cuts and trimmings</b>		
Spoilage	Micro contamination of product during dressing and subsequent handling	GMP – hygienic dressing, cutting and boning Refer to Supporting Sys. xx.
	Micro growth due to improper time/temperature control	GMP – time/temperature control, proper refrigeration Refer to Supporting Sys. xx.
Wholesomeness defects (e.g. blood clots, bruises, hair)	Improper handling of live animals and dressing of carcasses	GMP – handling of stock, hygienic dressing, trimming Refer to Supporting Sys. xx.
<b>Red offal for human consumption</b>		
Spoilage	Micro contamination of product during dressing and subsequent handling	GMP – hygienic dressing, cutting and boning Refer to Supporting Sys. xx.
	Micro growth due to improper time/temperature control	GMP – time/temperature control, proper refrigeration Refer to Supporting Sys. xx.
Wholesomeness defects (e.g. hair)	Improper dressing techniques	GMP – hygienic dressing Refer to Supporting Sys. xx.
<b>Green runners</b>		
Spoilage	Micro growth due to improper time/temperature control	GMP – time/temperature control, use of metabisulphite Refer to Supporting Sys. xx.

## 2.10 Identification and Control of Risks from False or Misleading Labelling

Any information applied to the packaging must be correct and accurate. The RMP must identify the risk factors related to false or misleading labelling that are reasonably likely to occur for each animal product. It must also identify the control measures for addressing the risk factors. The control measures must be documented, including procedures for monitoring, corrective action and verification, and records. Only examples for carcasses, cuts and trimmings; red offal; and green runners are shown in Form 10.

### Form 10: Summary of identified risk factors and controls related to false or misleading labelling

Risk factor	Source or cause of risk factor	Control measure(s)
<b>All products</b>		
Incorrect details on label or transportation outers, e.g. <ul style="list-style-type: none"> <li>• species</li> <li>• claims (e.g. Halal, organic)</li> <li>• product description</li> <li>• lot id</li> <li>• storage directions</li> </ul>	Incorrect label design	Procedures for ensuring correct label design.  Refer to Supporting Sys. xx
	Product put in wrong carton or pack	Procedures for ensuring correct packaging of products.  Refer to Supporting Sys. xx.

## 2.11 Operator Verification

The operator must verify the effectiveness of their RMP against their documented procedures and any criteria defining the product's fitness for intended purpose (e.g. regulatory limit, important product characteristics, GMP requirements, critical limits). The verification procedures must be documented, including responsibilities, corrective action, frequencies, and records. The various verification activities may be summarised as shown in Form 11.

### Form 11: Summary of operator verification activities.

Activity	Description	Supporting System
Review of monitoring and corrective action records	All daily monitoring sheets checked to ensure that documented procedures are complied with, limits are adhered to, and appropriate corrective actions are taken	xxx
Microbiological testing of carcasses and trimmings (NMD)	NMD testing for: <ul style="list-style-type: none"> <li>• <i>E. coli</i></li> <li>• APC</li> <li>• <i>Salmonella</i></li> </ul>	xxx
Cusum inspection for defects	Inspection of cuts for defects	xxx
Internal audits	Internal audit involving: <ul style="list-style-type: none"> <li>• review of records</li> <li>• review of test results</li> <li>• reality checks</li> </ul>	xxx
Review of RMP including supporting systems	Review of effectiveness of RMP. Reassessment of RMP (e.g. hazards in light of new information and results to date, critical limits, process flow, inputs)	xxx
<i>Other activities related to the verification of CCPs, regulatory limits, important product characteristics, and supporting systems</i>		

## **2.12 Confirmation of Validity of the RMP**

Confirmation of validity is the initial demonstration that the RMP meets all requirements and that it is effective. The operator must confirm and provide evidence to the evaluator that:

- a. the RMP documentation is complete and complies with all relevant regulatory requirements; and
- b. the premises and equipment are ready to operate in accordance with the RMP and regulatory requirements;
- c. the programme is effective (i.e. GMP requirements, regulatory limits and important product characteristics are met consistently).

The requirements for confirmation are summarised in Attachment 1 of this generic RMP.

### Attachment 1: Summary of requirements for the confirmation of validity of the RMP

Requirements for a valid RMP	Evidence for demonstrating validity	Stage at which evidence is required	Requirement for a protocol
a) Documentation is complete	RMP document (use of a checklist is recommended)	Before application for registration	-----
(b) Premises and equipment are ready to operate	Actual design and construction of premises; equipment are available and ready to operate	Before application for registration	-----
	Commissioning reports for certain equipment (e.g. retort, drier)	Before or after registration	If commissioning is done after registration, then this must be included in the protocol.
(c) RMP is effective			
<ul style="list-style-type: none"> <li>Compliance with GMP requirements</li> </ul>	Records of compliance to: <ul style="list-style-type: none"> <li>documented procedures (e.g. monitoring records, internal audit reports); and</li> <li>measurable GMP requirements (e.g. product loadout temperatures)</li> </ul>	Before or after registration Any existing evidence should be made available to the evaluator, as required, prior to registration.	<u>A protocol is not required for most GMP operations.</u> The NZFSA may require a protocol for certain operations (Refer to the draft RMP Manual).
<ul style="list-style-type: none"> <li>Compliance with regulatory limits</li> </ul>	Records of data collected (i.e. regulatory limits and relevant critical limits)	Before or after registration	When there is insufficient evidence at the time of application for registration, the operator must provide a written protocol for collection of this evidence.
<ul style="list-style-type: none"> <li>Compliance with important product characteristics</li> </ul>	Records of <ul style="list-style-type: none"> <li>data collected (i.e. important product characteristic and/or related process parameters); and/or</li> <li>compliance to acceptable procedures (e.g. procedures from a COP that ensure that resulting products comply with the relevant product characteristic).</li> </ul>	Before or after registration	<u>For food safety:</u> When there is insufficient evidence at the time of application for registration (e.g. for new businesses or new process), the operator must provide a written protocol for collection of data (i.e. measurable parameters).  <u>For wholesomeness:</u> A protocol is not required.