Generic RMP Models

for the Slaughter and Dressing of Farmed Mammals

Prelims

Amendment 0

December 2008

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Website

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

1 Introduction

Amendment 0

December 2008

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). These generic RMP models have been produced by the New Zealand Food Safety Authority, in consultation with an industry working group, to assist processors in the development of their RMP. It shows how the principles of Hazard Analysis and Critical Control Points (HACCP) can be applied and how RMP components could be written for a slaughter and dressing, and cutting and boning operation. It is emphasised that these models are not intended to represent the outcome of a complete RMP. Individual premises must customise their RMP to their specific products, processes and premises.

These generic RMP models are 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 HACCP (e.g. US requirement for critical control points addressing the zero faecal tolerance criteria for carcasses and the control of E. coli O157).

1.2 Contents of this Generic RMP

Table 1 summarises the required components of an RMP, and indicates whether the particular component is covered or not in this generic RMP model. **For practical reasons, not all requirements regarding the documentation of the RMP are covered in these generic RMP models.**

A brief instruction or explanation about the RMP component is given for each section in the model, followed by a worked example presented as a form or table. **Instructions and explanations are not part of the RMP and should be removed by the operator when preparing their own RMPs based on this generic model.** Operators do not need to follow the format used in these models but it is important that all required information is documented clearly in their RMP.

Supporting systems must be documented and form part of the RMP. Lists of recommended supporting systems are given in sections 2.6, 3.6, 4.6 and 5.6, however, examples of documented supporting systems are not provided. Guidance on the documentation of supporting systems is given in Part 2 of the Meat Code of Practice.

A comprehensive discussion of the RMP requirements and components is given in the Risk Management Programme Manual which is available on the NZFSA website.

Table 1: RMP Components

Components	Section of the Generic RMP Models
Operator, Business and RMP identification.	Form 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.	Form 2
Scope of the RMP.	Form 3
Product description.	Form 4
Process description.	Form 5
Good Operating Practice (Supporting systems).	A list of recommended supporting systems is given. The supporting systems must be documented in the RMP. Examples are not given in this generic RMP. Refer to Part xx of the COP.
Application of HACCP (identification, analysis and control of hazards to human or animal health).	Forms 6 and 7
Identification and control of other risk factors (wholesomeness, false or misleading labelling).	Forms 8 and 9
Identification and competency of responsible persons.	This must 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. Refer to Part xx of the COP.
Recall procedures.	This must be documented in a supporting system. An example is not shown in this generic RMP. Refer to Part xx of the COP.
Corrective action procedures for unforeseen circumstances.	This must be documented in a supporting system. An example is not shown in this generic RMP. Refer to Part xx of the COP.

Components	Section of the Generic RMP Models
Notification requirements.	This must be documented in a supporting system. An example is not shown in this generic RMP. Refer to Part xx of the COP.
Operator verification.	Form 10
Provision for external verification.	RMP Specification 2008, Clause 17 should be copied or referenced in the RMP.
Document control and requirements for records.	This must be documented in a supporting system. An example is not shown in this generic RMP. Refer to Part xx of the COP.
Confirmation of validity of the RMP.	Refer to the RMP Manual.

1.3 Possible changes to HACCP Application

NZFSA has designed a new domestic food regulatory system following four years of consultation and policy development. A new Food Bill is being developed to legislate this system. As part of this system, NZFSA is in the process of standardising the approach to HACCP. Once this approach has been finalised it is likely that the approach under other legislation such as the Animal Products Act 1999 and the Wine Act 2003 will be aligned. This is not expected to result in any significant changes to the approach to HACCP under the Animal Products Act.

2 Generic RMP for Slaughter, Dressing, Cooling and Boning of Bobby Calves

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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 to assist in the traceability of documents.

Form 1: Operator, Business and RMP Identification

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

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.	*Give name or, preferably, give position or designation.*
Deputy for day-to-day manager.	*Give name or, preferably, give position or designation.*

2.3 Scope of the RMP

The operator must clearly define the coverage and application of the RMP.

Form 3: Scope of the RMP

Elements	Description/Details
Physical boundaries.	Physical boundaries indicated on site plan given in Appendix xx. *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.*
Risk factors covered by the RMP.	Risk factors associated with: • Human health (for products intended for human consumption) • Animal health (for products intended for animal consumption) • Wholesomeness • False or misleading labelling.
Animal material being processed.	Live bobby calves.
Products. [1, 2]	• Carcasses • Boneless and bone-in cuts • Trimmings • Offal for human consumption (e.g. heart, liver, kidney, tongue) • Products for petfood (e.g. offal, trimmings) • Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock) • Animal material for pharmaceutical use (e.g. glands, blood).

Elements	Description/Details
Process. [1]	From receipt of the live animals to loadout of carcasses and packed products. Principal processing categories: • Slaughter and dressing • Boning/cutting • Refrigeration • Collection.
Exclusions.	*Identify those materials, products or activities excluded from the RMP, and the alternative regulatory regime they are under.* [3]

1. The products and processes covered by this generic RMP are examples only based on a typical New Zealand bobby calf processing operation. The operator must ensure that their RMP accurately reflects their own products and processes.

   The hazard analysis shown in this generic RMP only covers the processing of carcasses, cuts, and red offal to provide examples of how hazard analysis can be done. The operator must ensure that their RMP includes a hazard analysis for all products or product groups, and processes covered by their RMP.

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 necessary for proper identification of hazards and their controls, 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 any animal material, animal product, or food which is processed within the physical boundaries of the RMP is 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 and/or operator-defined limit. Other information such as company specifications for packaging, labelling, and shelf life may be included.

No regulatory limit has been defined for raw meat products, including bobby veal.

Form 4: Product Descriptions and Intended Purpose

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Carcasses, cuts and trimmings for human consumption.	• Passed ante- and post-mortem examination • Meets microbiological outcomes set under the National Microbiological Database (NMD) programme • Chilled or frozen as per regulatory and company specifications • Packed and labelled as per regulatory and company specification.	Further processing into manufactured products, retail products, food service items.	General public	Cooked

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Offal for human consumption.	• Passed post-mortem examination • Chilled or frozen as per regulatory and company specifications • Packed and labelled as per regulatory and company specification.	Further processing into manufactured products, retail products, food service items.	General public	Cooked
Products for petfood (e.g. offal, trimmings).	• Passed as fit for animal consumption • Packed and labelled as per regulatory and company specifications.	Further processing into petfood.	Pets	Raw or cooked
Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock).	• Labelled as per regulatory and company specifications.	Rendering.	Animals	Ingredient in petfood & animal feed.
			Industrial use	Fertiliser

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Animal material for pharmaceutical use for human consumption.	• Obtained from animals that have passed ante and post-mortem examination as fit for human consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	General public	Ingredient in pharmaceutical products.
Animal material for pharmaceutical use for animal consumption.	• Passed as fit for animal consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	Animals	Ingredient in pharmaceutical products (e.g. veterinary medicine).

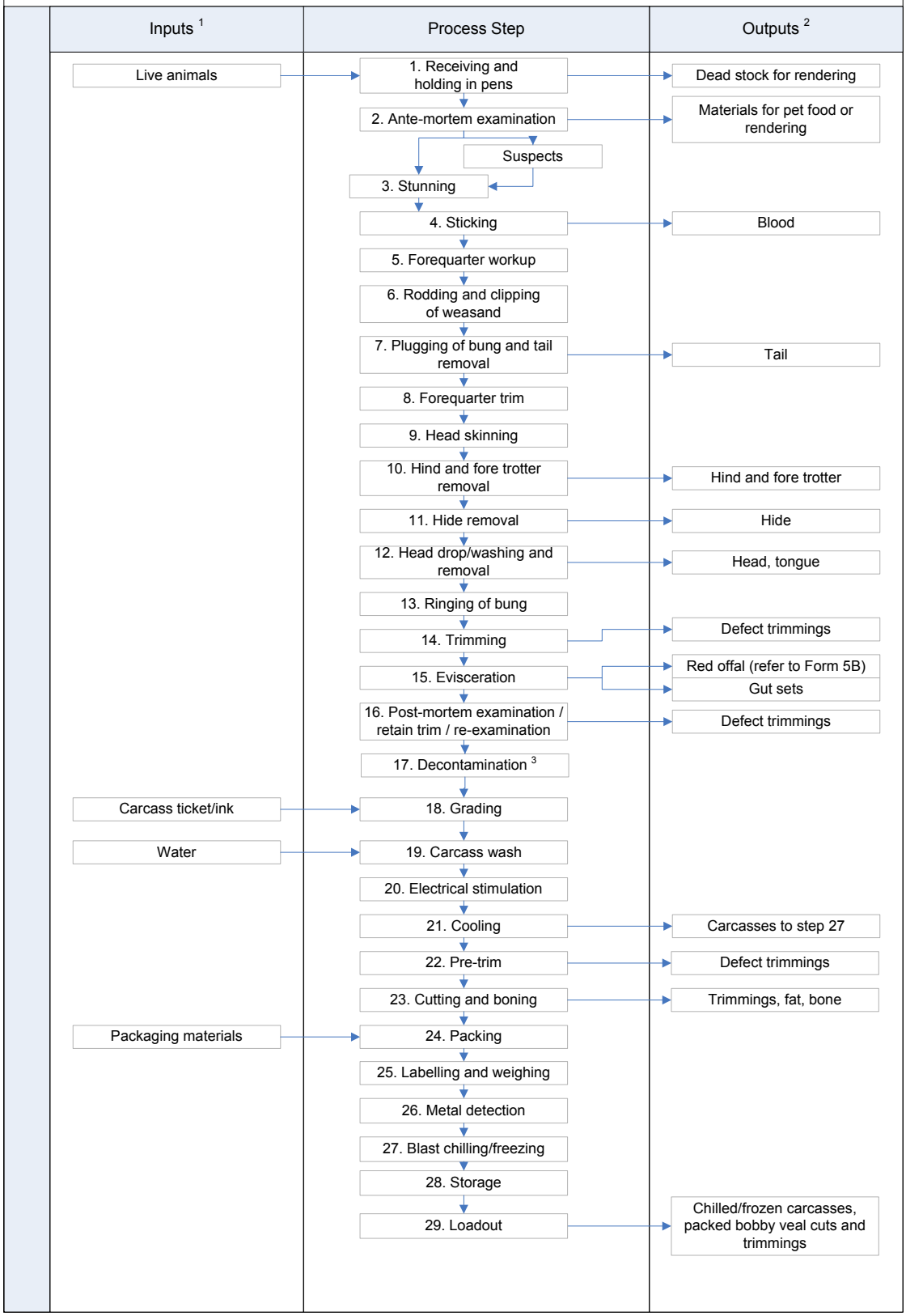
2.5 Process Description

The process flow diagram(s) must accurately show the full extent of the process for all products covered by the RMP (i.e. up to loadout of each product or product group, including any rework or recycling steps). There is no prescribed format for the diagram but it should set out all steps sequentially, and show relevant inputs and outputs.

The examples given in this section are simplified presentations of the key steps based on a generic process. Only the main chain and processing of red offal for human consumption are shown as examples.

Form 5A:

Process Flow Diagram for Slaughter, Dressing, Cooling and Boning



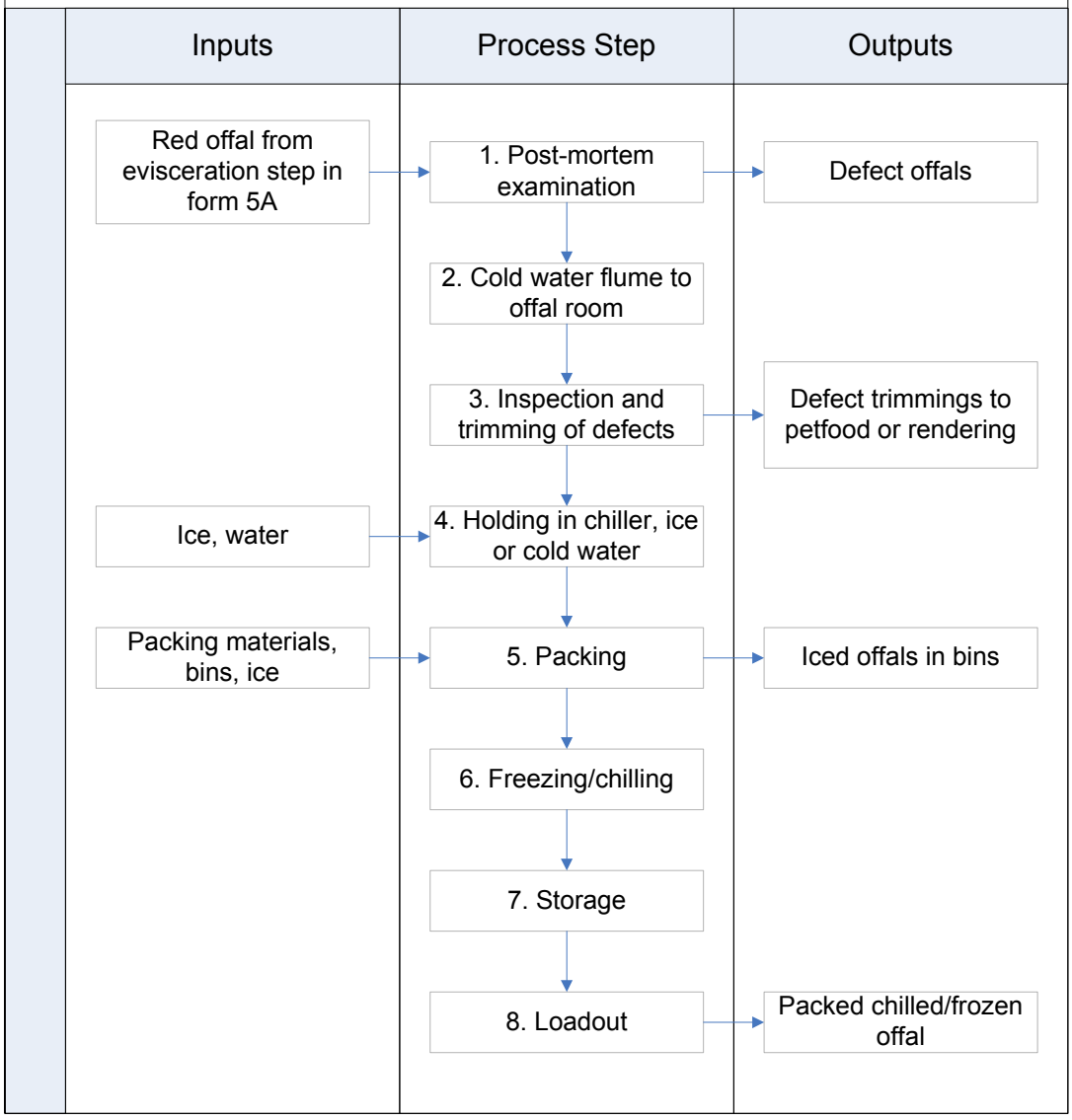
1. Only those inputs that become part of the final product have been identified in this generic RMP. Companies may wish to include processing aids that come in contact with their product.

2. All outputs for human or animal consumption must be identified in the process flow.

3. The type, number and location of the decontamination steps within the process will differ for each premises. Antimicrobial decontamination steps currently being used in New Zealand are steam vacuum and chemical sprays. Refer to TD 99/185 for the New Zealand requirements for the use of hand held steam vacuum devices. Refer to USA OMAR: Meat and Ratite Products, section 2.6 for the requirements for the decontamination of bobby calves.

Form 5B:

Process Flow Diagram for Red Offal for Human Consumption



2.6 Good Operating Practice (Supporting Systems)

The operator must document Good Operating Practices (GOP) in relevant supporting systems (also known as prerequisite programmes, good hygienic practices) before applying HACCP principles to the process. These supporting systems must comply with all relevant regulatory requirements, particularly the Animal Product Regulations 2000 and the current versions of the Animal Products (Specifications for Products Intended for Human Consumption) Notice and the Animal Products (Specifications for Products Intended for Animal Consumption) Notice. Each documented supporting system should provide information on: authorities and responsibilities, procedures (including control, monitoring, corrective action and operator verification procedures), and requirements for record keeping.

Part 2 of the Meat Code of Practice provides guidance on supporting systems relevant to the scope of this generic RMP. Supporting systems must cover the activities and procedures listed below:

- Design, construction and maintenance of buildings, facilities and equipment;
- Potable water;
- Sanitation and cleaning of processing areas, facilities and equipment;
- Personnel hygiene;
- Training of personnel;
- Control of chemicals;
- Pest control;
- Waste management;
- Repairs and maintenance of equipment;
- Refrigeration management;
- Food contact materials (specifications, handling and storage);
- Reception of animals (e.g. presentation status, condition of stock, supplier declarations);
- Ante- and post-mortem examination procedures (when these activities are done by the operator);

- Hygienic processing procedures (e.g. hygienic techniques and procedures for dressing, cutting, boning, collection of animal material; cleaning and sterilisation of equipment, dropped meat);
- Handling and disposition of detained and non-conforming products;
- Calibration of equipment and measuring devices;
- Sampling and testing procedures;
- National Microbiological Database (NMD) procedures;
- Product identification and traceability;
- Inventory control;
- Recall of products;
- Document control (including procedures for amendments);
- Verification and notifications procedures.

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 [1]	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 hide, e.g. Salmonella spp., Campylobacter jejuni, E. coli O157:H7 Bacterial pathogens associated with grossly-detectable abnormalities (i.e. fever, abscesses, navel infections), e.g. Salmonella spp. for fever Bacterial pathogens associated with bacteraemia [2],e.g. Salmonella spp.	Chemical residues, e.g. antibacterial products (sulphonamide).	None
Water/ice/steam.	Potable water.	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

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

2. Currently, potential hazards associated with bacteraemia cannot be adequately addressed by any control measure applied during the slaughter and dressing process, including post-mortem examination. Therefore, this hazard will not be considered further in this generic RMP.

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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
1. Receiving and Holding	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Refer to Form 6.	No		
		C – Chemical residues	Refer to Form 6.	Controlled under the national residue programme. [4] Supplier declarations.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
2. Ante-mortem examination	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried from previous step.	Controlled under the ante-mortem examination system. [5]	No	
3. Stunning	Live animal	None				
4. Sticking	Live animal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct sticking technique will minimise contamination.	No	
5. Forequarter workup	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct opening cuts and flaying techniques, and prevention of rollback will minimise contamination.	No	
6. Rodding & clipping weasand	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass with ingesta from the gastrointestinal tract (GIT) can occur at this step.	Yes – correct rodding and clipping techniques will minimise contamination.	No	
7. Plugging bung / tail removal	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass with faecal material can occur at this step.	Yes – correct plugging and tail removal techniques will minimise contamination.	No	
8. Forequarter trim	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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
9. Head skinning	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct skinning techniques will minimise contamination.	No	
10. Hind & fore trotter removal	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	No		
11. Hide removal	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step. Faecal leakage is likely to cause faecal contamination on the rump and anal areas of the carcass.	Yes – correct hide removal techniques will minimise contamination. Plugging of the bung partially controls occurrence of faecal leakage.	No	
12. Head drop / washing & removal	Carcass / head / offal	B – enteric pathogens	Micro carried over from the previous step.	No		
13. Ringing of bung	Carcass / offal	B – enteric pathogens	Further contamination of the anal and rump areas during ringing is inevitable when faecal leakage occurs at Step 11.	Yes – correct ringing techniques will minimise contamination.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification [1]**	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
14. Trimming	Carcass / offal	B – enteric pathogens	Micro carried over from the previous step.	Yes – hygienic trimming will remove any visible faecal contamination and reduce micro contamination on the anal and rump areas.	No	
15. Evisceration	Carcass / offal	B - enteric pathogens	Micro contamination from the GIT can occur at this step.	Yes – hygienic techniques during freeing and dropping of the bung, and prevention of puncturing the GIT will minimise contamination.	No	
16. Post-mortem / retain trim / re-examination	Carcass	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [5]	No	
		B – enteric pathogens	Micro carried over from the previous step.	Yes – identification and hygienic trimming will remove any visible faecal contamination and reduce micro contamination on affected parts of the carcass.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
17. Decontamination	Carcass	B – enteric pathogens	Micro carried over from the previous step.	Yes – use of steam vacuum will reduce micro levels on vacuumed areas; or application of an antimicrobial spray will reduce micro levels on the carcass.	No	
18. Grading	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
19. Carcass wash	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
20. Electrical stimulation	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
21. Cooling	Carcass	B – enteric pathogens	Micro carried over from the previous step. Growth of mesophiles can occur if there is cooling failure.	Yes – effective cooling will prevent the growth of mesophiles.	No	
22. 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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
23. 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 – hygienic boning techniques will minimise contamination, and temperature control will prevent micro growth.	No	
		P – bone in boneless product	Bone pieces can occur in boneless products.	Yes – correct boning techniques will minimise bone in boneless product.	No	
24. Packing	Cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
25. Labelling & weighing	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
26. Metal detection	Packed cuts & trimmings	None [6]				
27. 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 – effective refrigeration will prevent micro growth.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
28. Storage	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
29. Loadout	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if temperature abuse occurs.	Yes – time/temperature control during loadout will prevent micro growth.	No	

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. 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 bobby calves are generally in compliance with national requirements. Therefore, they will not be considered further at subsequent steps in this generic RMP.

5. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

6. The operator should assess whether metal is a hazard that is reasonably likely to occur in their product. In some cases, the installation of a metal detector and its identification as a CCP is a client requirement. Any client or market access CCP must be clearly identified as such in the RMP.

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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
1. Post-mortem examination	Red offal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [4]	No	
		B – enteric pathogens	Micro carried over from the evisceration step.	Yes – post-mortem examination system will identify offals that are not acceptable for collection.	No	
2. Cold water flume to offal room	Red 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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
3. Inspection and trimming of defects	Red offal	B – enteric pathogens	Micro carried over from the previous step.	Yes – hygienic handling and trimming techniques will minimise contamination.	No	
4. Holding in chiller, ice or cold water	Red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is not chilled properly and promptly.	Yes – effective chilling will minimise micro growth.	No	
	Ice / cold water	None				
5. Packing	Red offal	B – enteric pathogens	Micro carried over from the previous step.	No		
	Packaging material	None				
	Bins (cleaned / sanitised)	None				
	Ice	None				

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
6. Freezing	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
7. Storage	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
8. Load out	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is temperature abused.	Yes – time/temperature control during loadout will prevent micro growth.	No	

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

2.8 CCP Summary

A CCP was not identified for the slaughter and dressing of bobby calves, and the cooling and boning of bobby veal and co-products. The control of hazards at key steps is expected to be adequately addressed by GOP.

[Note: If a CCP is identified for a particular product/process (e.g. when a control measure is essential for the achievement of an operator-defined limit), the operator must apply the other HACCP principles related to a CCP (i.e. the identification of critical limits, CCP monitoring and corrective action).]

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; and red offal are shown in Form 8.

Form 8: Summary of Identified Risk Factors and Controls Related to Wholesomeness

Risk Factor	Source or Cause of Risk Factor	Control Measure
Carcasses, cuts and trimmings.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP – hygienic dressing, cutting and boning.
	Micro growth due to improper time/temperature control.	GOP – time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. blood clots, bruises, hair).	Improper handling of live animals and dressing of carcasses.	GOP – handling of stock, hygienic dressing, trimming.
Red offal for human consumption.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP – hygienic handling.
	Micro growth due to improper time/temperature control.	GOP – time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. hair).	Improper dressing techniques.	GOP - hygienic dressing.

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. An example is shown in Form 9.

Form 9: Summary of Identified Risk Factors and Controls Related to False or Misleading Labelling

Risk Factor	Source or Cause of Risk Factor	Control Measure(s)
All products.		
Incorrect details on label or transportation outers, e.g. • species • claims (e.g. Halal, organic) • product description • lot id • storage directions.	Incorrect label design.	Procedures for ensuring correct label design.
	Product put in wrong carton or pack.	Procedures for ensuring correct packaging of products.

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 limits, operator-defined limits, GOP 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 10.

Form 10: 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).	Microbiological testing as set out in the NMD programme.	xxx
Cusum inspection for defects.	Inspection of cuts for defects.	xxx
Internal audits.	Internal audit involving: • review of records • review of test results • reality checks.	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
Other activities related to the verification of CCPs, regulatory limits, operator-defined limits, and supporting systems.		

3 Generic RMP for Slaughter, Dressing, Cooling and Boning of Cattle

Amendment 0

December 2008

3.1 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 to assist in the traceability of documents.

Form 1: Operator, Business and RMP Identification

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

3.2 Management Authorities and Responsibilities

The operator must give the 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.	*Give name or, preferably, give position or designation.*
Deputy for day-to-day manager.	*Give name or, preferably, give position or designation.*

3.3 Scope of the RMP

The operator must clearly define the coverage and application of the RMP.

Form 3: Scope of the RMP

Elements	Description/Details
Physical boundaries.	Physical boundaries indicated on site plan given in Appendix xx. *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.*
Risk factors covered by the RMP.	Risk factors associated with: • Human health (for products intended for human consumption) • Animal health (for products intended for animal consumption) • Wholesomeness • False or misleading labelling.
Species.	Bovine.
Products. [1, 2]	• Carcasses • Boneless and bone-in cuts • Trimmings • Offal for human consumption (e.g. heart, liver, kidney, tongue) • Products for petfood (e.g. offal, trimmings) • Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock) • Animal material for pharmaceutical use (e.g. glands, blood).

Elements	Description/Details
Process. [1]	From receipt of live animals to loadout of carcasses and packed products. Principal processing categories: • Slaughter and dressing • Boning/cutting • Refrigeration • Collection.
Exclusions.	*Identify those materials, products or activities excluded from the RMP, and the alternative regulatory regime they are under*. [3]

1. The products and processes covered by this generic RMP are examples only based on a typical New Zealand beef processing operation. The operator must ensure that their RMP accurately reflects their own products and processes.

   The hazard analysis shown in this generic RMP only covers the processing of carcasses, beef cuts, and red offal to provide examples of how hazard analysis can be done. The operator must ensure that their RMP includes a hazard analysis for all products or product groups, and processes covered by their RMP.

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 necessary for proper identification of hazards and their controls, 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 any animal material, animal product, or food which is processed within the physical boundaries of the RMP is 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.

3.4 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, and any regulatory limit and/or operator-defined limit. Other information such as company specifications for packaging, labelling, and shelf life may be included.

No regulatory limit has been defined for raw meat products, including beef.

Form 4: Product Descriptions and Intended Purpose

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Carcasses, cuts and trimmings for human consumption.	• Passed ante- and post-mortem examination • Meets microbiological outcomes set under the NMD programme • Chilled or frozen as per regulatory and company specifications • Packed and labelled as per regulatory and company specification.	Further processing into manufactured products, retail products, food service items.	General public	Cooked

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Offal for human consumption.	• Passed post-mortem examination • Chilled or frozen as per regulatory and company specifications • Packed and labelled as per regulatory and company specifications.	Further processing into manufactured products, retail products, food service items.	General public	Cooked
Products for petfood (e.g. offal, trimmings).	• Passed as fit for animal consumption • Packed and labelled as per regulatory and company specifications.	Further processing into petfood.	Pets	Raw or cooked
Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock).	• Labelled as per regulatory and company specifications.	Rendering.	Animals	Ingredient in petfood & animal feed.
			Industrial use	Fertiliser

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Animal material for pharmaceutical use for human consumption.	• Obtained from animals that have passed ante and post-mortem examination as fit for human consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	General public	Ingredient in pharmaceutical products.
Animal material for pharmaceutical use for animal consumption.	• Passed as fit for animal consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	Animals	Ingredient in pharmaceutical products (e.g. veterinary medicine).

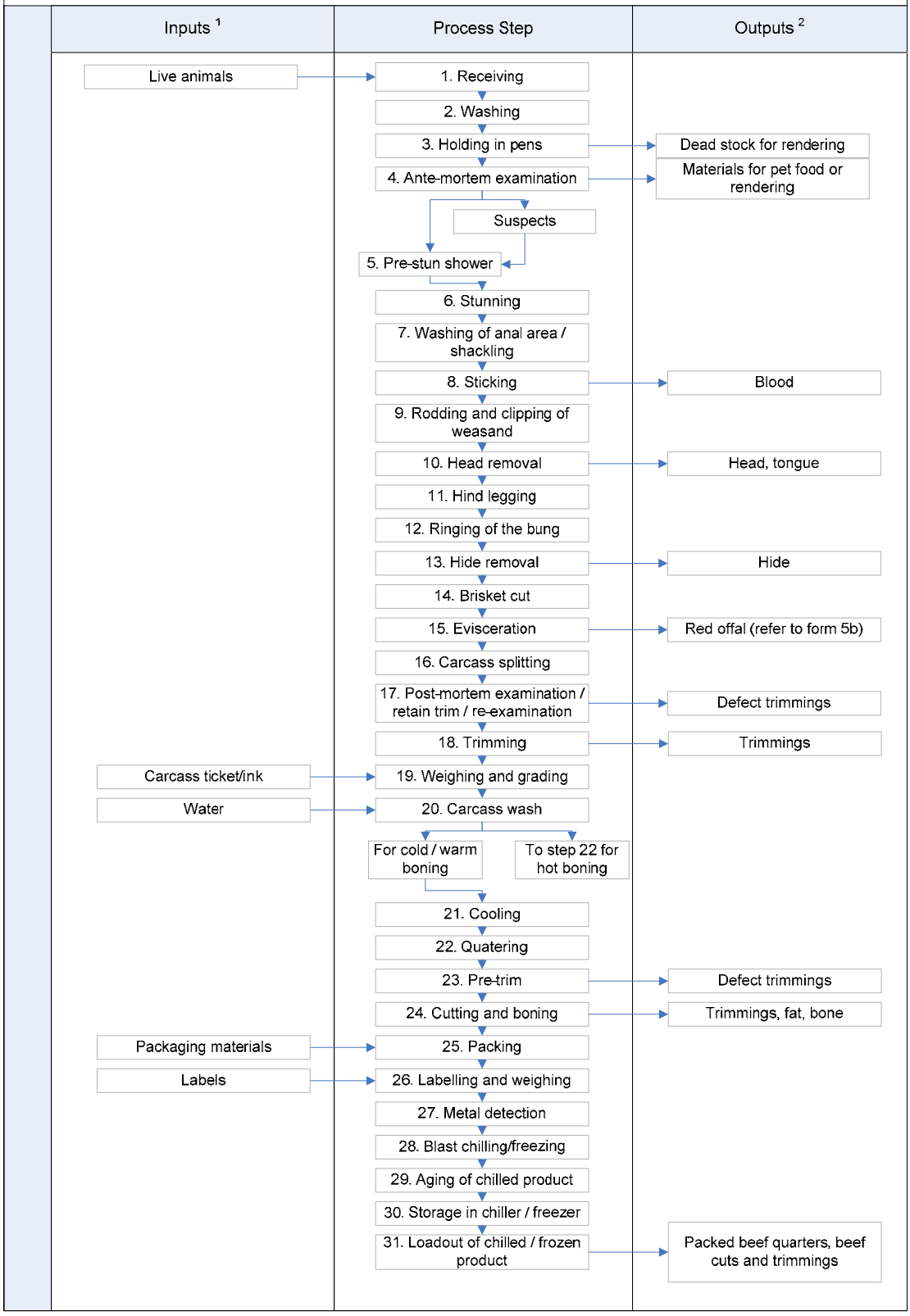
3.5 Process Description

The process flow diagram(s) must accurately show the full extent of the process for all products covered by the RMP (i.e. up to loadout of each product or product group, including any rework or recycling steps). There is no prescribed format for the diagram but it should set out all steps sequentially, and show relevant inputs and outputs.

The examples given in this section are simplified presentations of the key steps based on a generic process. Only the main chain and processing of red offal for human consumption are shown as examples.

Form 5A:

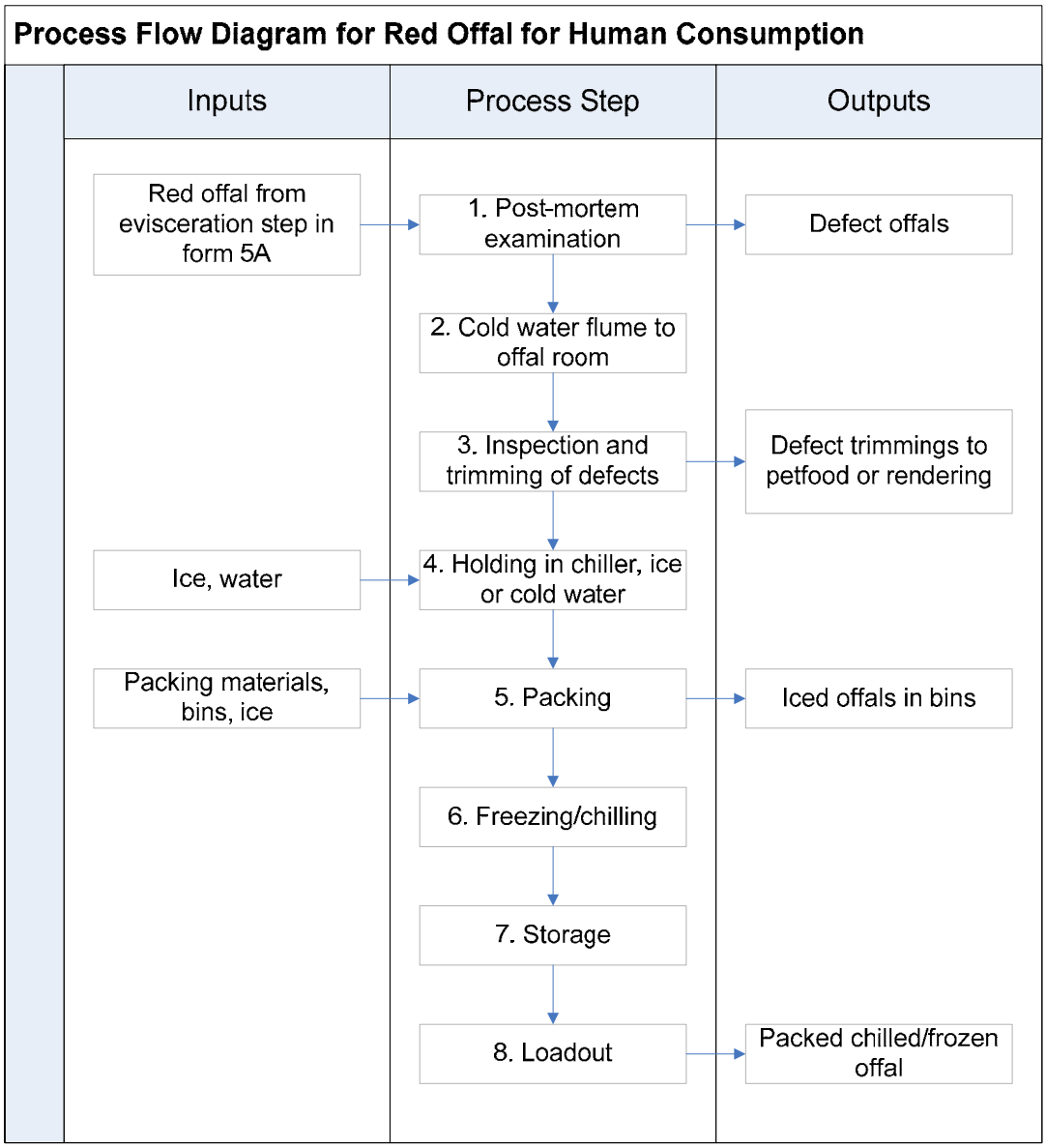
Process Flow Diagram for Slaughter, Dressing, Cooling and Boning



1. Only those inputs that become part of the final product have been identified in this generic RMP. The operator may wish to include processing aids that come into contact with their product.

2. All outputs for human or animal consumption must be identified in the process flow.

Form 5B:



3.6 Good Operating Practice (Supporting Systems)

The operator must document Good Operating Practices (GOP) in relevant supporting systems (also known as prerequisite programmes, good hygienic practices) before applying HACCP principles to the process. These supporting systems must comply with all relevant regulatory requirements, particularly the Animal Product Regulations 2000 and the current versions of the Animal Products (Specifications for Products Intended for Human Consumption) Notice and the Animal Products (Specifications for Products Intended for Animal Consumption) Notice. Each documented supporting system should provide information on: authorities and responsibilities, procedures (including control, monitoring, corrective action and operator verification procedures), and requirements for record keeping.

Part 2 of the Meat Code of Practice provides guidance on supporting systems relevant to the scope of this generic RMP. Supporting systems must cover the activities and procedures listed below:

- Design, construction and maintenance of buildings, facilities and equipment;
- Potable water;
- Sanitation and cleaning of processing areas, facilities and equipment;
- Personnel hygiene;
- Training of personnel;
- Control of chemicals;
- Pest control;
- Waste management;
- Repairs and maintenance of equipment;
- Refrigeration management;
- Food contact materials (specifications, handling and storage);
- Reception of animals (e.g. presentation status, condition of stock, supplier declarations);
- Ante- and post-mortem examination procedures (when these activities are done by the operator);

- Hygienic processing procedures (e.g. hygienic techniques and procedures for dressing, cutting, boning, collection of animal material; cleaning and sterilisation of equipment, dropped meat);
- Handling and disposition of detained and non-conforming products;
- Calibration of equipment and measuring devices;
- Sampling and testing procedures;
- National Microbiological Database (NMD) procedures;
- Product identification and traceability;
- Inventory control;
- Recall of products;
- Document control (including procedures for amendments);
- Verification and notifications procedures.

3.7 Hazard Analysis and CCP Determination

3.7.1 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 [1]	Biological Hazard (B)	Chemical Hazard (C)	Physical Hazard (P)
Live animal.	Complies with regulatory requirements for animals presented for slaughter.	Bacterial pathogens associated with faeces, ingesta and dirt from the gastro intestinal tract and the hide, e.g. Salmonella spp., Campylobacter jejuni, E. coli O157:H7. Bacterial pathogens associated with grossly-detectable abnormalities (i.e. fever, abscesses), e.g. Salmonella spp. for fever. Parasites - e.g. Taenia saginata [2]. For cows - bacterial pathogens associated with contamination from mastitic milk, e.g. Staphylococcus aureus.	Chemical residues, e.g. veterinary medicines, environmental contaminants.	Shotgun pellets.
Water/ice/steam.	Potable water.	None	None	None
Branding ink.	Suitable for use as food contact material.	None	None	None
Carcass tickets.	Suitable for use as food	None	None	None

Inputs	Description/Specification [1]	Biological Hazard (B)	Chemical Hazard (C)	Physical Hazard (P)
	contact material.			
Packaging materials.	Suitable for use as food contact material.	None	None	None

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

2. The carcass is inspected for T. saginata during post-mortem, but existing inspection methods have low sensitivity to low grade infection of cattle. In certain circumstances, T. saginata may still be present in the inspected and passed carcass. In these cases, a HACCP-based programme for further detection and removal of T. saginata may be applicable during boning. However, for the purposes of this generic model, and considering the rare occurrence of this hazard in beef, this hazard will not be considered any further in the hazard analysis.

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 [1]	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and answer Q2 [2].	Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit? If yes, this step is a CCP [3]. If no, this step is not a CCP.	CCP no.
1. Receiving	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Refer to Form 6.	No		

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2]. If no, this step is not a CCP.	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
		C – Chemical residues	Refer to Form 6.	Controlled under the national residue programme. [4] Supplier declarations.	No	
2. Washing	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from previous step.	No		
3. Holding in pens	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from previous step.	No		
4. Ante-mortem examination	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from previous step.	Controlled under the ante-mortem examination system. [5]	No	
5. Pre-stun shower	Live animal	None				
6. Stunning	Live animal	None				

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
7. Washing of anal area/ shackling	Live animal	None				
8. Sticking	Live animal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct sticking technique will minimise contamination.	No	
9. Rodding and clipping weasand	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass with ingesta from the gastrointestinal tract (GIT) can occur at this step.	Yes – correct rodding and clipping technique will minimise contamination.	No	
10. Head removal	Carcass / head / offal	B – enteric pathogens	Micro carried over from the previous step.	No		
11.Legging	Carcass / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct skinning technique will minimise contamination.	No	
12. Ringing	Carcass / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct ringing technique will minimise contamination.	No	
13. Hide removal	Carcass / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct hide removal techniques will minimise contamination.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
14. Brisket cut	Carcass / offal	B – enteric pathogens	Micro carried over from the previous step.	No		
15. Evisceration	Carcass / offal	B – enteric pathogens	Micro contamination from the GIT can occur at this step.	Yes – hygienic techniques during freeing and dropping of the bung, and prevention of puncturing the GIT will minimise contamination.	No	
16. Carcass splitting	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
17. Post-mortem / retain / re-examination	Carcass	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the previous step.	Controlled under the post-mortem examination system. [5]	No	
		B – enteric pathogens	Micro carried over from the previous step.	Yes – identification and hygienic trimming will remove any visible faecal contamination and reduce micro contamination on affected parts of the carcass.	No	
18. Trimming	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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
19. Weighing & grading	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
20. Carcass wash	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
21. Cooling	Carcass	B – enteric pathogens	Micro carried over from the previous step. Growth of mesophiles can occur if there is cooling failure.	Yes – effective cooling will prevent the growth of mesophiles.	No	
22. Quartering	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
23. Pre-trim	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
24. 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 – hygienic boning techniques will minimise contamination, and temperature control will prevent micro growth.	No	
		P – bone in boneless product	Bone can occur in boneless products.	Yes – correct boning techniques will minimise bone in boneless product.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
25. Packing	Cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
26. Labelling & weighing	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
27. Metal detection	Packed cuts & trimmings	None [6]				
28. 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 – effective refrigeration will prevent micro growth.	No	
29. Aging of chilled product	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
30. Storage	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification [1]	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and answer Q2 [2].	Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit? If yes, this step is a CCP [3]. If no, this step is not a CCP.	CCP no.
31. Loadout	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if product is temperature abused.	Yes – time/temperature control during loadout will prevent micro growth.	No	

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. 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 cattle are generally in compliance with national requirements. Therefore, they have not been considered further at subsequent steps in this generic RMP.

5. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

6. The operator should assess whether metal is a hazard that is reasonably likely to occur in their product. In some cases, the installation of a metal detector and its identification as a CCP is a client requirement. Any client or market access CCP must be clearly identified as such in the RMP.

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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
1. Post-mortem examination	Red offal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [4]	No	
		B – enteric pathogens	Micro carried over from the evisceration step.	Yes – post-mortem examination system will identify offals that are not acceptable for collection.	No	
2. Cold water flume to offal room	Red offal	B – enteric pathogens	Micro carried over from the previous step.	No		
3. Inspection and trimming of defects	Red offal	B – enteric pathogens	Micro carried over from the previous step.	Yes – hygienic handling and trimming techniques will minimise contamination.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
4. Holding in chiller, ice or cold water	Red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is not chilled properly and promptly.	Yes – effective cooling will minimise micro growth.	No	
	Ice / cold water	None				
5. Packing	Red offal	B – enteric pathogens	Micro carried over from the previous step.	No		
	Packaging material	None				
	Bins (cleaned/ sanitised)	None				
	Ice	None				
6. Freezing / chilling	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification [1]**	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
7. Storage	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
8. Load out	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is temperature abused.	Yes – time/temperature control during loadout will prevent micro growth.	No	

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

3.8 CCP Summary

A CCP was not identified for the slaughter and dressing of cattle, and the cooling and boning of beef and co-products. The control of hazards at key steps is expected to be adequately addressed by GOP.

[Note: If a CCP is identified for a particular product/process (e.g. when a control measure is essential for the achievement of an operator-defined limit), the operator must apply the other HACCP principles related to a CCP (i.e. the identification of critical limits, CCP monitoring and corrective action).]

3.9 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; and red offal are shown in Form 8.

Form 8: Summary of Identified Risk Factors and Controls Related to Wholesomeness

Risk Factor	Source or Cause of Risk Factor	Control Measure
Carcasses, cuts and trimmings.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP – hygienic dressing, cutting and boning.
	Micro growth due to improper time/temperature control.	GOP – time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. blood clots, bruises, hair).	Improper handling of live animals and dressing of carcasses.	GOP – handling of stock, hygienic dressing, trimming.
Red offal for human consumption.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP – hygienic handling.
	Micro growth due to improper time/temperature control.	GOP - time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. hair).	Improper dressing techniques.	GOP – hygienic dressing.

3.10 Identification and Control of Risks from False or Misleading Labelling

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. An example is shown in Form 9.

Form 9: Summary of Identified Risk Factors and Controls Related to False or Misleading Labelling

Risk Factor	Source or Cause of risk Factor	Control Measure(s)
All products		
Incorrect details on label or transportation outers, e.g. • species • claims (e.g. Halal, organic) • product description • lot id • storage directions.	Incorrect label design.	Procedures for ensuring correct label design.
	Product put in wrong carton or pack.	Procedures for ensuring correct packaging of products.

3.11 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 limits, operator-defined limits, GOP 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 10.

Form 10: 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.	Microbiological testing as set out in the NMD programme.	xxx
Cusum inspection for defects.	Inspection of cuts for defects.	xxx
Internal audits.	Internal audit involving: • review of records • review of test results • reality checks.	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
Other activities related to the verification of CCPs, regulatory limits, operator-defined limits, and supporting systems.		

4 Generic RMP for Slaughter, Dressing, Cooling and Boning of Farmed Deer

Amendment 0

December 2008

4.1 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 to assist in the traceability of documents.

Form 1: Operator, Business and RMP identification

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

4.2 Management Authorities and Responsibilities

The operator must give the 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.	*Give name or, preferably, give position or designation.*
Deputy for day-to-day manager .	*Give name or, preferably, give position or designation.*

4.3 Scope of the RMP

The operator must clearly define the coverage and application of the RMP.

Form 3: Scope of the RMP

Elements	Description/Details
Physical boundaries.	Physical boundaries indicated on site plan given in Appendix xx. *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.*
Risk factors covered by the RMP.	Risk factors associated with: • Human health (for products intended for human consumption) • Animal health (for products intended for animal consumption) • Wholesomeness • False or misleading labelling.
Species.	Cervine.
Products. [1, 2]	• Carcasses • Boneless and bone-in cuts • Trimmings • Offal for human consumption (e.g. heart, liver, kidney, tongue) • Products for petfood (e.g. offal, trimmings) • Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock) • Animal material for pharmaceutical use (e.g. glands, blood).

Elements	Description/Details
Process. [1]	From receipt of live farmed deer to loadout of carcasses and packed products. Principal processing categories: • Slaughter and dressing • Boning/cutting • Refrigeration • Collection.
Exclusions.	*Identify those materials, products or activities excluded from the RMP, and the alternative regulatory regime they are under.* [3]

1. The products and processes covered by this generic RMP are examples only based on a typical New Zealand deer processing operation. The operator must ensure that their RMP accurately reflects their own products and processes.

   The hazard analysis shown in this generic RMP only covers the processing of carcasses, venison cuts, and red offal to provide examples of how hazard analysis can be done. The operator must ensure that their RMP includes a hazard analysis for all products or product groups, and processes covered by their RMP.

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 necessary for proper identification of hazards and their controls, 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 any animal material, animal product, or food which is processed within the physical boundaries of the RMP is 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.

4.4 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, and any regulatory limit and/or operator-defined limit relevant to the products' fitness for intended purpose. Other information such as company specifications for packaging, labelling, and shelf life may also be included.

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

Form 4: Product descriptions and intended purpose

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Carcasses, cuts and trimmings for human consumption.	• Passed ante- and post-mortem examination • Meets microbiological outcomes set under the NMD programme • Chilled or frozen as per regulatory and company specifications • Packed and labelled as per regulatory and company specification.	Further processing into manufactured products, retail products, food service items.	General public	Cooked

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Offal for human consumption.	• Passed post-mortem examination • Chilled or frozen as per regulatory and company specifications • Packed and labelled as per regulatory and company specifications.	Further processing into manufactured products, retail products, food service items.	General public	Cooked
Products for petfood (e.g. offal, trimmings).	• Passed as fit for animal consumption • Packed and labelled as per regulatory and company specifications.	Further processing into petfood.	Pets	Raw or cooked
Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock).	• Labelled as per regulatory and company specifications.	Rendering.	Animals	Ingredient in petfood & animal feed.
			Industrial use	Fertiliser

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Animal material for pharmaceutical use for human consumption.	• Obtained from animals that have passed ante and post-mortem examination as fit for human consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	General public	Ingredient in pharmaceutical products.
Animal material for pharmaceutical use for animal consumption.	• Passed as fit for animal consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	Animals	Ingredient in pharmaceutical products (e.g. veterinary medicine).

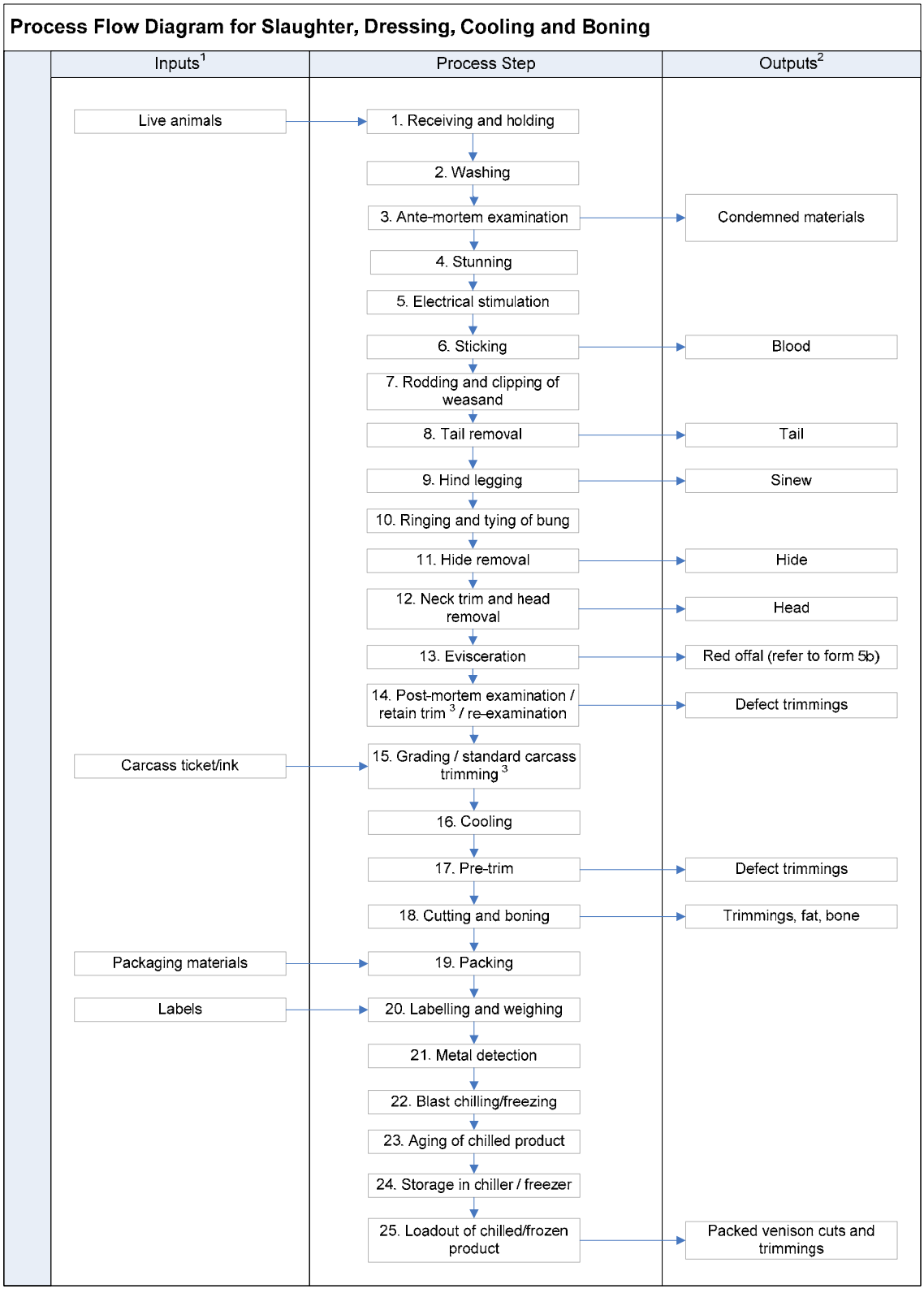
4.5 Process Description

The process flow diagram(s) must accurately show the full extent of the process for all products covered by the RMP (i.e. up to loadout of each product or product group, including any rework or recycling steps). There is no prescribed format for the diagram but it should set out all steps sequentially, and show relevant inputs and outputs.

The examples given in this section are simplified presentations of the key steps based on a generic process. Only the main chain and processing of red offal for human consumption are shown as examples.

Form 5A:

Process Flow Diagram for Slaughter, Dressing, Cooling and Boning

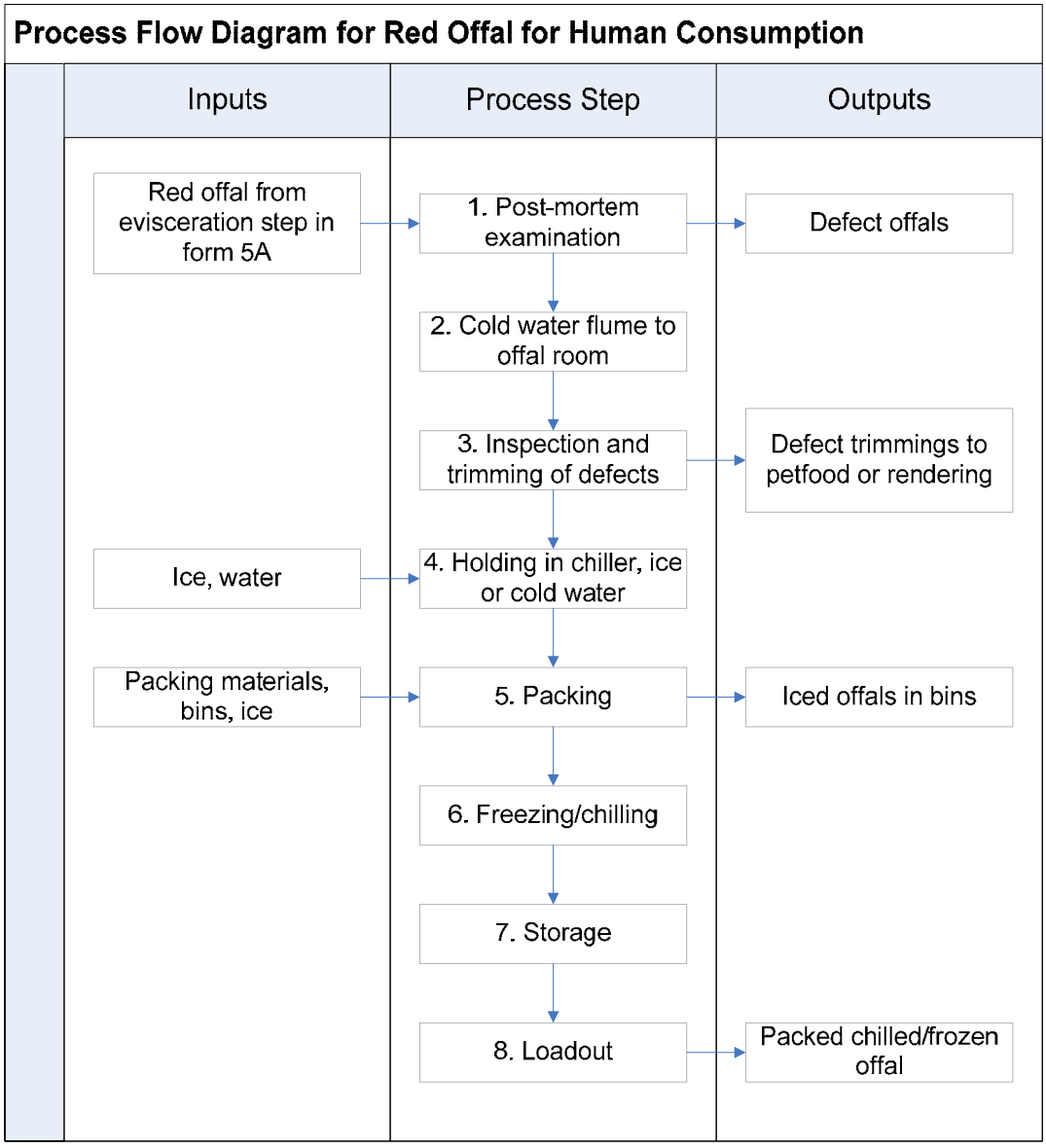


1. Only those inputs that become part of the final product have been identified in this generic RMP. The operator may wish to include processing aids that come into contact with their product.

2. All outputs for human or animal consumption must be identified in the process flow.

3. Two types of trimming are done during the dressing of venison carcasses. Defect trimming deals with the removal of visible defects such as faecal stains and hair. The other type of trimming is the standard carcass trim which relates to quality and market requirements.
   Minor visible defects are generally trimmed off immediately after they occur. Any remaining visible contamination on the carcass (e.g. major faecal and ingesta contamination due to evisceration) is trimmed off at the retain rail. Location of the trimming steps varies according to customised practices at each premises.

Form 5B:



4.6 Good Operating Practice (Supporting Systems)

The operator must document Good Operating Practices (GOP) in relevant supporting systems (also known as prerequisite programmes, good hygienic practices) before applying HACCP principles to the process. These supporting systems must comply with all relevant regulatory requirements, particularly the Animal Product Regulations 2000 and the current versions of the Animal Products (Specifications for Products Intended for Human Consumption) Notice and the Animal Products (Specifications for Products Intended for Animal Consumption) Notice. Each documented supporting system should provide information on: authorities and responsibilities, procedures (including control, monitoring, corrective action and operator verification procedures), and requirements for record keeping.

Part 2 of the Meat Code of Practice provides guidance on supporting systems relevant to the scope of this generic RMP. Supporting systems must cover the activities and procedures listed below:

- Design, construction and maintenance of buildings, facilities and equipment;
- Potable water;
- Sanitation and cleaning of processing areas, facilities and equipment;
- Personnel hygiene;
- Training of personnel;
- Control of chemicals;
- Pest control;
- Waste management;
- Repairs and maintenance of equipment;
- Refrigeration management;
- Food contact materials (specifications, handling and storage);
- Reception of animals (e.g. presentation status, condition of stock, supplier declarations);
- Ante- and post-mortem examination procedures (when these activities are done by the operator);

- Hygienic processing procedures (e.g. hygienic techniques and procedures for dressing, cutting, boning, collection of animal material; cleaning and sterilisation of equipment, dropped meat);
- Handling and disposition of detained and non-conforming products;
- Calibration of equipment and measuring devices;
- Sampling and testing procedures;
- National Microbiological Database (NMD) procedures;
- Product identification and traceability;
- Inventory control;
- Recall of products;
- Document control (including procedures for amendments);
- Verification and notifications procedures.

4.7 Hazard Analysis and CCP Determination

4.7.1 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 [1]	Biological Hazard (B)	Chemical Hazard (C)	Physical Hazard (P)
Live animal.	Complies with regulatory requirements for animals presented for slaughter.	Bacterial pathogens associated with faeces, ingesta and dirt from the gastro intestinal tract and the hide, e.g. Salmonella spp., Campylobacter jejuni, E. coli O157:H7. Bacterial pathogens associated with grossly-detectable abnormalities (i.e. fever, abscesses), e.g. Salmonella spp. for fever. Parasites - e.g. Toxoplasma gondii.	Chemical residues, e.g. veterinary medicines, environmental contaminants.	None
Water/ice/steam.	Potable water.	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

1. Agreed specifications and procedures for inputs must be documented in the RMP.

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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
1. Receiving	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Refer to Form 6.	No		
		B - Parasites- e.g. *Toxoplasma gondii*	Refer to Form 6.	No [4]		
		C – Chemical residues	Refer to Form 6.	Controlled under the national residue programme. [5] Supplier declarations.	No	
2. Washing	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from previous step.	No		

Process Step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
3. Ante-mortem examination	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from previous step.	Controlled under the ante-mortem examination system. [6]	No	
4. Stunning	Live animal	None				
5. Electrical stimulation	Live animal	None				
6. Sticking	Live animal	B – enteric pathogens	Micro contamination of the carcass from the hide and/or gastrointestinal tract (GIT) can occur at this step.	Yes – correct sticking technique will minimise contamination.	No	
7. Rodding & clipping of weasand	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass with ingesta from the GIT can occur at this step.	Yes – correct rodding and clipping technique will minimise contamination.	No	
8. Tail removal	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct tail removal technique will minimise contamination.	No	
9. Legging	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct skinning technique will minimise contamination.	No	

Process Step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
10. Ringing	Carcass / head / offal	B – enteric pathogens	Micro and visible contamination of the anal and rump areas can occur due to sporadic faecal leakage at this step.	Yes – correct ringing technique will minimise contamination.	No	
11. Hide removal	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the hide can occur at this step.	Yes – correct hide removal techniques will minimise contamination.	No	
12. Neck trim & head removal	Carcass / head / offal	B – enteric pathogens	Micro carried from the previous step.	Yes – trimming will remove contamination on the neck area.	No	
13. Evisceration	Carcass / offal	B – enteric pathogens	Micro contamination on the brisket and foreleg areas can occur due to sporadic faecal contamination from the GIT.	Yes – hygienic techniques during freeing and dropping of the bung, and prevention of puncturing the GIT will minimise contamination.	No	
14. Post-mortem / retain / re-examination	Carcass	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [6]	No	

Process Step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
		B – enteric pathogens	Micro carried over from the previous step.	Yes – identification and hygienic trimming will remove any visible faecal contamination and reduce micro contamination on affected parts of the carcass.	No	
15. Grading / standard trimming	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
16. Cooling	Carcass	B – enteric pathogens	Micro carried over from the previous step. Growth of mesophiles can occur if there is cooling failure.	Yes – effective cooling will prevent the growth of mesophiles.	No	
17. Pre-trim	Carcass	B – enteric pathogens	Micro carried over from the previous step.	No		
18. 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 – hygienic boning techniques will minimise contamination, and temperature control will prevent micro growth.	No	

Process Step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
		P – bone in boneless product	Bone pieces can occur in boneless products.	Yes – correct boning techniques will minimise bone in boneless product.	No	
19. Packing	Cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
20. Labelling & weighing	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step.	No		
21. Metal detection	Packed cuts & trimmings	None [7]				
22. 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 – effective refrigeration will prevent micro growth.	No	
		B – *Toxoplasma gondii*	Refer to Form 6 and footnote 4.	Yes for frozen products – freezing to ≤ - 12°C will render tissue cysts of T. gondii nonviable. No for chilled products.	No	

Process Step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
23. Aging of chilled product	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
		B – *Toxoplasma gondii* in chilled products	Hazard carried from previous step.	No		
24. Storage	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
		B – *Toxoplasma gondii* in chilled products	Hazard carried from previous step.	No		
25. Loadout	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if temperature abuse occurs.	Yes – time/temperature control during loadout will prevent micro growth.	No	

Process Step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification [1]	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and answer Q2 [2]. If no, this step is not a CCP.	Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit? If yes, this step is a CCP [3]. If no, this step is not a CCP.	CCP no.
		B – *Toxoplasma gondii* in chilled products	Hazard carried from previous step.	No		

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. *Toxoplasma gondii* cannot be adequately addressed by any control measure applied during the slaughter and dressing process, including post-mortem examination. However, freezing to ≤ - 12°C will render tissue cysts of T. gondii nonviable. To avoid repetition in the table, the hazard is not carried through each step. Instead T. gondii is considered at the freezing step 22, and is shown as a potential unaddressed hazard in chilled products from step 23 to loadout.

5. 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 farmed deer are generally in compliance with national requirements. Therefore, they have not been considered further at subsequent steps in this generic RMP.

6. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator . Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

7. The operator should assess whether metal is a hazard that is reasonably likely to occur in their product. In some cases, the use of a metal detector and its identification as a CCP is a client requirement. Any client or market access CCP must be clearly identified as such in the RMP.

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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is this step a CCP?** **Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
1. Post-mortem examination	Red offal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [4]	No	
		B – enteric pathogens	Micro carried over from the evisceration step.	Yes – post-mortem examination system will identify offals that are not acceptable for collection.	No	
2. Conveying to offal room	Red 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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is this step a CCP?** **Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
3. Checking for, and trimming of, defects	Red offal	B – enteric pathogens	Micro carried over from the previous step.	Yes – hygienic handling and trimming techniques will minimise contamination.	No	
4. Holding in chiller / ice / cold water	Red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is not chilled properly and promptly.	Yes – effective chilling will minimise micro growth.	No	
	Ice / cold water	None				
5. Packing	Red offal	B – enteric pathogens	Micro carried over from the previous step.	No		
	Packaging material	None				
	Bins (cleaned/ sanitised)	None				
	Ice	None				

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is this step a CCP?** **Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
6. Freezing / chilling	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
7. Storage	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – effective refrigeration will prevent micro growth.	No	
8. Load out	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is temperature abused.	Yes – time / temperature control during loadout will prevent micro growth.	No	

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

4.8 CCP Summary

A CCP was not identified for the slaughter and dressing of farmed deer, and the cooling and boning of venison and co-products. The control of hazards at key steps is expected to be adequately addressed by GOP.

[Note: If a CCP is identified for a particular product/process (e.g. when a control measure is essential for the achievement of an operator-defined limit), the operator must apply the other HACCP principles related to a CCP (i.e. the identification of critical limits, CCP monitoring and corrective action).]

4.9 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; and red offal are shown in Form 8.

Form 8: Summary of identified risk factors and controls related to wholesomeness

Risk Factor	Source or Cause of Risk Factor	Control Measure
Carcasses, cuts and trimmings.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP - hygienic dressing, cutting and boning.
	Micro growth due to improper time/temperature control.	GOP – time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. blood clots, bruises, hair).	Improper handling of live animals and dressing of carcasses.	GOP – proper handling of stock, hygienic dressing, trimming.
Red offal for human consumption.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP – hygienic handling.
	Micro growth due to improper time/temperature control.	GOP – time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. hair).	Improper dressing techniques.	GOP – hygienic dressing.

4.10 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. An example is shown in Form 9.

Form 9: Summary of identified risk factors and controls related to false or misleading labelling

Risk Factor	Source or Cause of Risk Factor	Control Measure(s)
All products.		
Incorrect details on label or transportation outers, e.g. • species • claims (e.g. Halal, organic) • product description • lot id • storage directions.	Incorrect label design.	Procedures for ensuring correct label design.
	Product put in wrong carton or pack.	Procedures for ensuring correct packaging of products.

4.11 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 limits, operator-defined limits, GOP 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 10.

Form 10: 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).	Microbiological testing as set out in the NMD programme.	xxx
Cusum inspection for defects.	Inspection of cuts for defects.	xxx
Internal audits.	Internal audit involving: • review of records • review of test results • reality checks.	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
Other activities related to the verification of CCPs, regulatory limits, operator-defined limits, and supporting systems.		

5 Generic RMP for Slaughter, Dressing, Cooling and Boning of Sheep [1]

Amendment 0

December 2008

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

5.2 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.

[1] The process and product description for goats is considered to be equivalent to that for sheep. As a result this Generic RMP Model can be used when developing an RMP for the processing of goats. Any specific differences that operators may need to consider during this development will be outlined in the Technical Annex.

Form 2: Management Authorities and Responsibilities

Authority/Responsibility	Details
Day-to-day manager.	*Give name or, preferably, give position or designation.*
Deputy for day-to-day manager.	*Give name or, preferably, give position or designation.*

5.3 Scope of the RMP

The operator must clearly define the coverage and application of the RMP.

Form 3: Scope of the RMP

Elements	Description/Details
Physical boundaries.	Physical boundaries indicated on site plan given in Appendix xx. *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.*
Risk factors covered by the RMP.	Risk factors associated with: • Human health (for products intended for human consumption) • Animal health (for products intended for animal consumption) • Wholesomeness • False or misleading labelling.
Species	Ovine

Elements	Description/Details
Products. [1, 2]	• Carcasses • Boneless and bone-in cuts • Trimmings • Offal for human consumption (green and red offal) • Green runners • Products for petfood (e.g. offal, trimmings) • Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock) • Animal material for pharmaceutical use (e.g. glands).
Process. [1]	From receipt of the live animals to loadout of carcasses and packed products. Principal processing categories: • Slaughter and dressing • Boning/cutting • Refrigeration.
Exclusions.	*Identify those materials, products or activities excluded from the RMP, and the alternative regulatory regime they are under.* [3]

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.
   The hazard analysis shown in this generic RMP only covers the processing of carcasses, meat cuts, and red offal to provide examples of how hazard analysis can be done. The operator must ensure that their RMP includes a hazard analysis for all products or product groups, and processes covered by their RMP.

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 necessary for proper identification of hazards and their controls, 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 any animal material, animal product, or food which is processed within the physical boundaries of the RMP is 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.

5.4 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, and any regulatory limit and/or operator-defined limit. Other information such as company specifications for packaging, labelling, and shelf life may also be included.

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

Form 4: Product Descriptions and Intended Purpose

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Carcasses, cuts and trimmings for human consumption.	• Passed ante- and post-mortem examination • Meets microbiological outcomes set under the NMD programme • Chilled or frozen as per regulatory and company specifications. • Packed and labelled as per regulatory and company specification.	Further processing into manufactured products, retail products, food service items.	General public	Cooked

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Offal for human consumption.	• Passed post-mortem examination • Chilled or frozen as per company specification. • Packed and labelled as per regulatory and company specification.	Further processing into manufactured products, retail products, food service items.	General public	Cooked
Green runners for human consumption.	• Obtained from animals that have passed ante- and post-mortem examination • Packed in casks with metabisulphite.	Further processing into casings.	General public	Cooked (i.e. as sausage casings).
Products for petfood (e.g. offal, trimmings).	• Passed as fit for animal consumption • Packed and labelled as per regulatory and company specification.	Further processing into petfood.	Pets	Raw or cooked
Animal material for rendering (e.g. fat, trimmings, bone, blood, offal, dead stock).	• Labelled as per regulatory and company specifications.	Rendering.	Animals	Ingredient in petfood & animal feed.
			Industrial use	Fertiliser

Product Name	Product Description	Intended Use of Product Produced Under the RMP	Intended Consumer and Use by Consumer	
			Consumer	Use
Animal material for pharmaceutical use for human consumption.	• Obtained from animals that have passed ante and post-mortem examination as fit for human consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	General public	Ingredient in pharmaceutical products.
Animal material for pharmaceutical use for animal consumption.	• Passed as fit for animal consumption • Labelled as per regulatory and company specifications.	Further processing into pharmaceutical products.	Animals	Ingredient in pharmaceutical products (e.g. veterinary medicine).

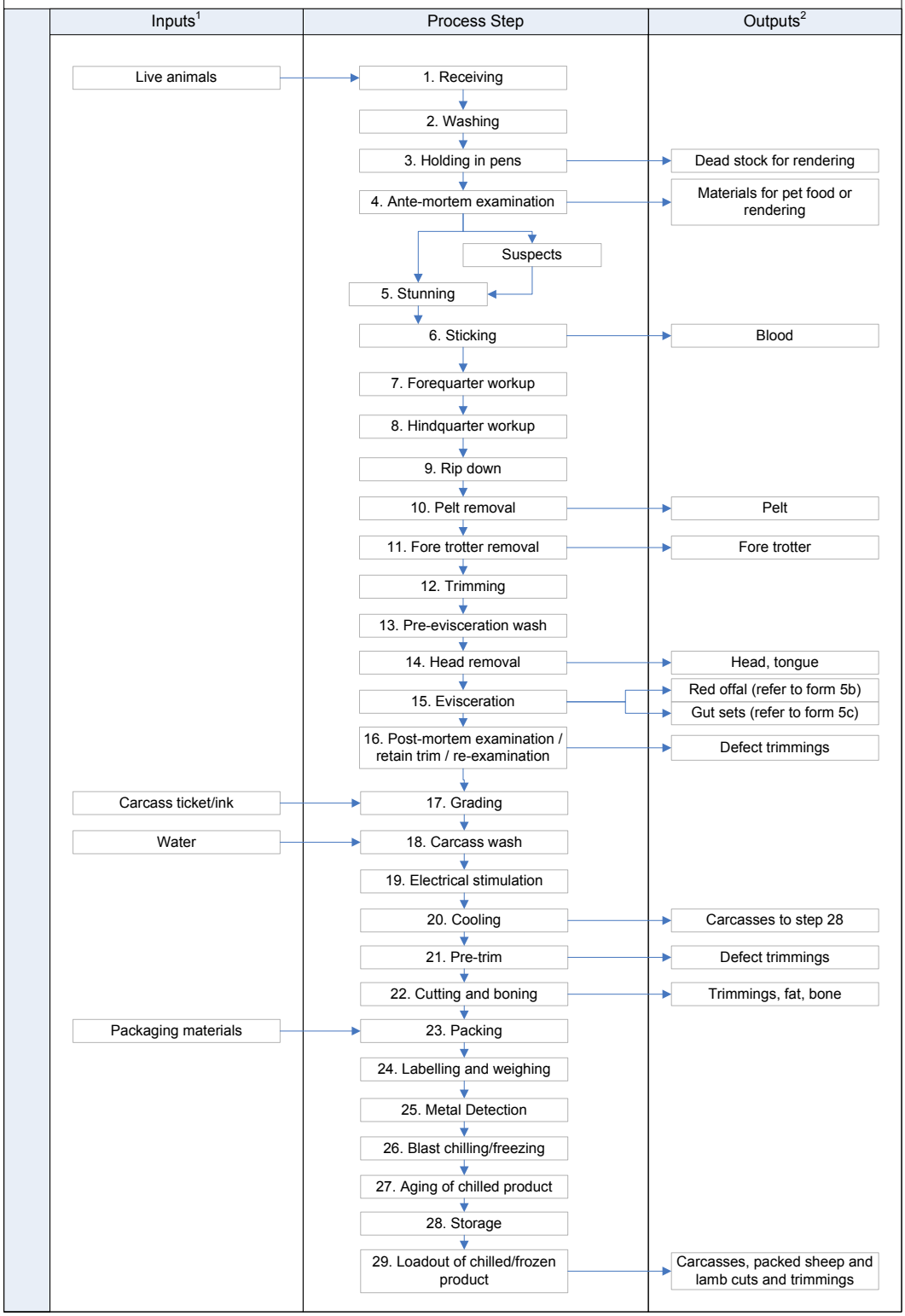
5.5 Process Description

The process flow diagram(s) must accurately show the full extent of the process for all products covered by the RMP (i.e. up to loadout of each product or product group, including any rework or recycling steps). There is no prescribed format for the diagram but it should set out all steps sequentially, and show relevant inputs and outputs.

The examples given in this section 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:

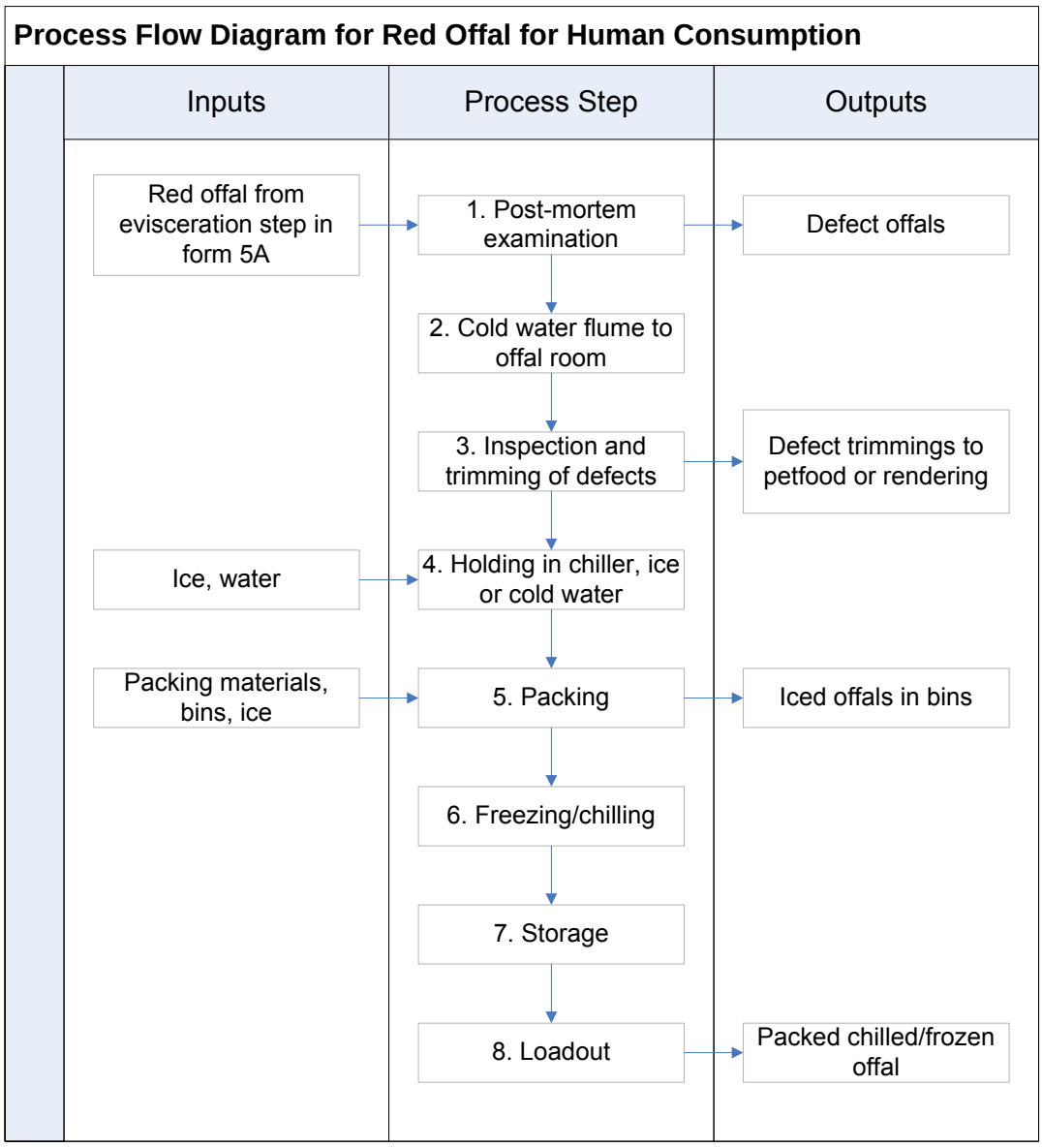
Process Flow Diagram for Slaughter, Dressing, Cooling and Boning



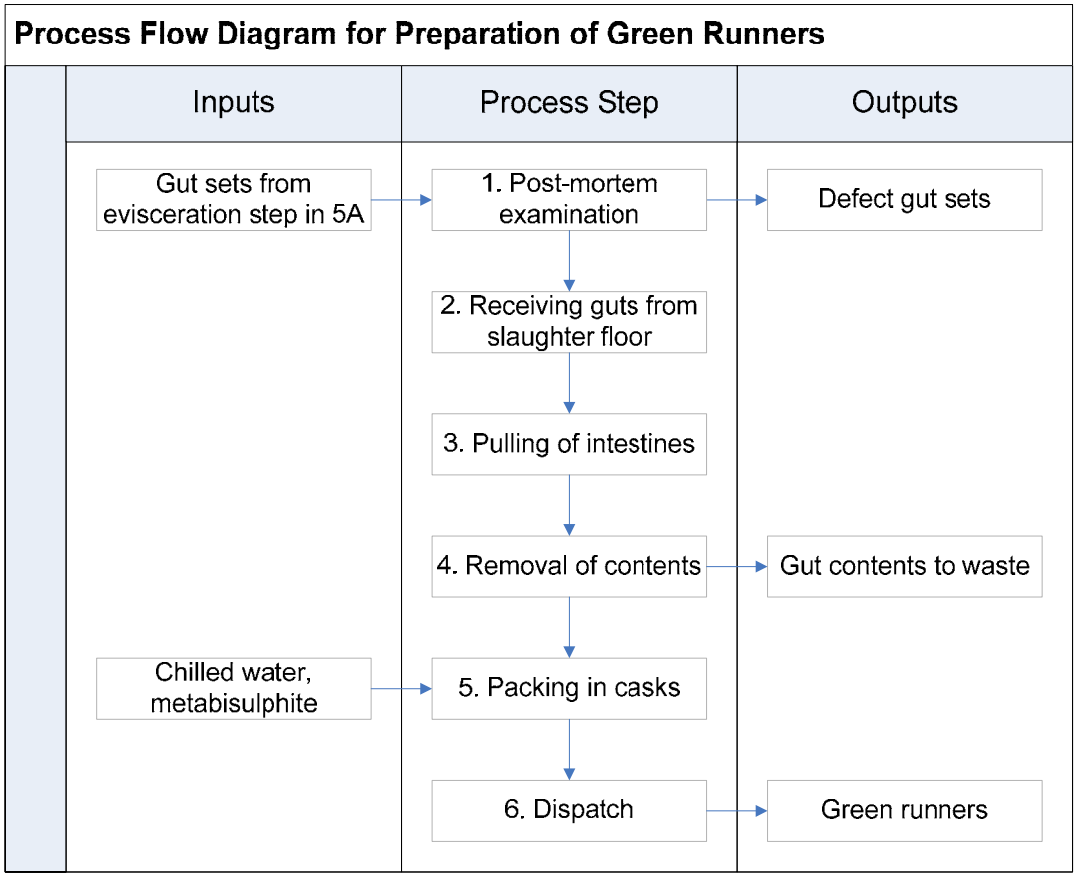
1. Only those inputs that become part of the final product have been identified in this generic RMP. The operator may wish to include processing aids that come into contact with their product.

2. All outputs for human or animal consumption must be identified in the process flow.

Form 5B:



Form 5C:


Process Flow Diagram for Preparation of Green Runners
Inputs
Process Step
Outputs
Gut sets from evisceration step in 5A
1. Post-mortem examination
Defect gut sets
2. Receiving guts from slaughter floor
3. Pulling of intestines
4. Removal of contents
Gut contents to waste
Chilled water, metabisulphite
5. Packing in casks
6. Dispatch
Green runners

5.6 Good Operating Practice (Supporting Systems)

The operator must document Good Operating Practices (GOP) in relevant supporting systems (also known as prerequisite programmes, good hygienic practices) before applying HACCP principles to the process. These supporting systems must comply with all relevant regulatory requirements, particularly the Animal Product Regulations 2000 and the current versions of the Animal Products (Specifications for Products Intended for Human Consumption) Notice, and the Animal Products (Specifications for Products Intended for Animal Consumption) Notice. Each documented supporting systems should provide information on: authorities and responsibilities, procedures (including control, monitoring, corrective action and operator verification), and requirements for recording requirements.

Part 2 of the Meat Code of Practice provides guidance on supporting systems relevant to the scope of this generic RMP. Supporting systems must cover the activities and procedures listed below:

- Design, construction and maintenance of buildings, facilities and equipment;
- Potable water;
- Sanitation and cleaning of processing areas, facilities and equipment;
- Personnel hygiene;
- Training of personnel;
- Control of chemicals;
- Pest control;
- Waste management;
- Repairs and maintenance of equipment;
- Refrigeration management;
- Food contact materials (specifications, handling and storage);
- Reception of animals (e.g. presentation status, condition of stock, supplier declarations);
- Ante- and post-mortem examination procedures (when these activities are done by the operator);

- Hygienic processing procedures (e.g. hygienic techniques and procedures for dressing, cutting, boning, collection of animal material; cleaning and sterilisation of equipment, dropped meat);
- Handling and disposition of detained and non-conforming products;
- Calibration of equipment and measuring devices;
- Sampling and testing procedures;
- National Microbiological Database (NMD) procedures;
- Product identification and traceability;
- Inventory control;
- Recall of products;
- Document control (including procedures for amendments);
- Verification and notifications procedures.

5.7 Hazard Analysis and CCP Determination

5.7.1 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 [1]	Biological Hazard (B)	Chemical Hazard (C)	Physical Hazard (P)
Live animal.	Complies with regulatory requirements for animals presented for slaughter.	Bacterial pathogens associated with faeces, ingesta and dirt from the gastro intestinal tract and the fleece/pelt, e.g. Salmonella spp., Campylobacter jejuni, Clostridium spp. Bacterial pathogens associated with grossly-detectable abnormalities (i.e. fever, abscesses), e.g. Salmonella spp. for fever. Toxoplasma gondii in the musculature.	Chemical residues , e.g. veterinary medicines, heavy metals.	None
Water/ice.	Potable water.	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

Inputs	Description/Specification [1]	Biological Hazard (B)	Chemical Hazard (C)	Physical Hazard (P)
Metabisulphite (for casings).	Food grade.	None	None	None

1. Agreed specifications and procedures for inputs must be documented in the RMP.

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 [1]	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and answer Q2 [2]. If no, this step is not a CCP.	Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit? If yes, this step is a CCP [3]. If no, this step is not a CCP.	CCP no.
1. Receiving	Live animal	B – Bacterial pathogens - grossly-detectable abnormalities	Refer to Form 6.	No		
		B – *Toxoplasma gondii*	Refer to Form 6	No [4]		
		C – Chemical residues	Refer to Form 6.	Controlled under the national residue programme. [5] Supplier declarations.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
2. Washing	Live animal	B – Bacterial pathogens – grossly-detectable abnormalities	Micro carried over from previous step.	No		
3. Holding in pens	Live animal	B – Bacterial pathogens – grossly-detectable abnormalities	Micro carried over from previous step.	No		
4. Ante-mortem examination	Live animal	B – Bacterial pathogens – grossly-detectable abnormalities	Micro carried over from previous step.	Controlled under the ante-mortem examination system. [6]	No	
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 – correct sticking technique will minimise contamination.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP 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 – correct flaying techniques and prevention of rollback will minimise contamination.	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 – correct flaying techniques and prevention of rollback will minimise contamination.	No	
9. Ripdown	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the fleece/pelt is likely to occur at this step.	Yes – correct ripdown techniques and prevention of rollback will minimise contamination.	No	
10. Pelt removal	Carcass / head / offal	B – enteric pathogens	Micro contamination of the carcass from the fleece/pelt is likely to occur at this step.	Yes – correct pelting techniques will minimise contamination.	No	
11. Fore trotter 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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
12. Trimming	Carcass / head / offal	B – enteric pathogens	Micro carried over from the previous step.	Yes – hygienic trimming will remove any visible faecal contamination and reduce micro contamination on the carcass.	No	
13. Pre-evisceration wash	Carcass / head / offal	B – enteric pathogens	Micro carried over from previous step.	No		
14. Head removal	Carcass / head / offal	B – enteric pathogens	Micro carried over from the previous step.	No		
15. Evisceration	Carcass / offal	B – enteric pathogens	Micro contamination from the GIT can occur at this step.	Yes – hygienic techniques during freeing and dropping of the bung and prevention of puncturing the GIT will minimise contamination.	No	
16. Post-mortem / retain / re-examination	Carcass	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [6]	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
		B – enteric pathogens	Micro carried over from the previous step.	Yes – hygienic trimming will remove any visible faecal contamination and reduce micro contamination on affected parts of the carcass.	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 – effective cooling will prevent the growth of mesophiles.	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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. 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 – hygienic boning techniques will minimise contamination, and temperature control will prevent micro growth.	No	
		P – bone in boneless product	Bone pieces can occur in boneless products.	Yes – correct boning techniques will minimise bone in boneless product.	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. Metal detection	Packed cuts & trimmings	None [7]				
26. 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 – effective refrigeration will prevent micro growth.	No	

Process step	**Inputs**	**Hazard reasonably likely to occur on or in the product at this step**	**Justification** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
		B- *Toxoplasma gondii*	Refer to Form 6 and footnote 4.	Yes for frozen products – freezing to ≤ -12°C will render tissue cysts of *T. gondii* nonviable. No for chilled products.	No	
27. 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 – effective refrigeration will prevent micro growth.	No	
28. Storage	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if refrigeration failure occurs.	Yes – effective refrigeration will prevent micro growth.	No	
		B – *Toxoplasma gondii* in chilled products	Hazard carried over from previous step.	No		
29. Loadout	Packed cuts & trimmings	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if temp abuse occurs.	Yes – time/temperature control during loadout will prevent micro growth.	No	

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification [1]	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and answer Q2 [2]. If no, this step is not a CCP.	Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit? If yes, this step is a CCP [3]. If no, this step is not a CCP.	CCP no.
		B – *Toxoplasma gondii* in chilled products	Hazard carried over from previous step.	No		

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. Toxoplasma gondii cannot be adequately addressed by any control measure applied during the slaughter and dressing process, including post-mortem examination. However, freezing to ≤ - 12°C will render tissue cysts of T. gondii nonviable. To avoid repetition in the table, the hazard is not carried through each step. Instead T. gondii is considered at the freezing step 26, and is shown as a potential unaddressed hazard in chilled products from step 26 to loadout.

5. 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 have not been considered further at subsequent steps in this generic RMP.

6. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

7. The operator should assess whether metal is a hazard that is reasonably likely to occur in their product. In some cases, the use of a metal detector and its identification as a CCP is a client requirement. Any client or market access CCP must be clearly identified as such in the RMP.

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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
1. Post-mortem examination	Red offal	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [4]	No	
		B – enteric pathogens	Micro carried over from the evisceration step.	Yes – post-mortem examination system will identify offals that are not acceptable for collection.	No	
2. Conveying to offal room	Red 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 [1]**	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
3. Checking for, and trimming of, defects	Red offal	B – enteric pathogens	Micro carried over from the previous step.	Yes – hygienic handling and trimming techniques will minimise contamination.	No	
4. Holding in chiller / ice / cold water	Red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is not chilled properly and promptly.	Yes – effective chilling will minimise micro growth.	No	
	Ice / cold water	None				
5. Packing	Red offal	B – enteric pathogens	Micro carried over from the previous step.	No		
	Packaging material	None				
	Bins (cleaned/ sanitised)	None				
6. Chilling / freezing	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes – proper temperature control will minimise micro growth.	No	

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification [1]	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and answer Q2 [2]. If no, this step is not a CCP.	Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit? If yes, this step is a CCP [3]. If no, this step is not a CCP.	CCP no.
	Ice	None				
7. Storage	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if there is refrigeration failure.	Yes –effective refrigeration will prevent micro growth.	No	
8. Load out	Packed red offal	B – enteric pathogens	Micro carried over from the previous step. Micro growth can occur if the product is temperature abused.	Yes – time/temperature control during loadout will prevent micro growth.	No	

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

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** [1]	**Q1. Is there a control measure(s) for the hazard at this step?** If yes, identify the control measure and answer Q2 [2].	**Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit?** If yes, this step is a CCP [3]. If no, this step is not a CCP.	**CCP no.**
1. Post-mortem examination	Gut sets	B – Bacterial pathogens - grossly-detectable abnormalities	Micro carried over from the evisceration step.	Controlled under the post-mortem examination system. [4]	No	
		B – enteric pathogens	Gut sets are likely to be contaminated with enteric pathogens.	No		
2. Receiving gut sets from slaughter floor	Gut sets	B – enteric pathogens	Micro carried over from the previous step.	No		
3. Pulling of intestines	Gut sets	B – enteric pathogens	Micro carried over from the previous step.	No		
4. Removal of contents	Intestines	B – enteric pathogens	Micro carried over from the previous step.	Yes –proper removal of intestinal contents will reduce the micro load.	No	
5. Packing in casks	Green runners	B – enteric pathogens	Micro carried over from the previous step.	Yes –use of metabisulphite will minimise micro growth.	No	
	Water	None				
	Metabisulphite	None				

Process step	Inputs	Hazard reasonably likely to occur on or in the product at this step	Justification [1]	Q1. Is there a control measure(s) for the hazard at this step? If yes, identify the control measure and answer Q2 [2].	Q2. Is the control measure at this step essential to food safety as defined by a regulatory limit or an operator-defined limit? If yes, this step is a CCP [3]. If no, this step is not a CCP.	CCP no.
6. Dispatch	Green runners	B – enteric pathogens	Micro carried over from the previous step.	No		

1. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

2. The procedures for the control measures must be documented in the RMP.

3. A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The control measure at the step must be essential to food safety as defined by a regulatory limit or an operator defined food safety limit (i.e. no CCP if there is no defined limit). A critical limit, which is measurable and can be monitored on an ongoing basis, must be established for the CCP. The justifications given are supported by scientific information provided in the Technical Annex to this Generic RMP.

4. Grossly detectable abnormalities are addressed during ante-mortem and post-mortem examinations, which are currently the responsibility of the regulator. Therefore, they will only be considered at the ante- and post-mortem steps in this generic RMP. 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.

5.8 CCP Summary

A CCP was not identified for the slaughter and dressing of sheep, and the cooling and boning of sheep meat and co-products. The control of hazards at key steps is expected to be adequately addressed by GOP.

[Note: If a CCP is identified for a particular product/process (e.g. when a control measure is essential for the achievement of an operator-defined limit), the operator must apply the other HACCP principles related to a CCP (i.e. the identification of critical limits, CCP monitoring and corrective action).]

5.9 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 8.

Form 8: Summary of Identified Risk Factors and Controls Related to Wholesomeness

Risk Factor	Source or Cause of risk Factor	Control Measure
Carcasses, cuts and trimmings.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP – hygienic dressing, cutting and boning.
	Micro growth due to improper time/temperature control.	GOP – time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. blood clots, bruises, hair).	Improper handling of live animals and dressing of carcasses.	GOP – handling of stock, hygienic dressing, trimming.
Red offal for human consumption.		
Spoilage.	Micro contamination of product during dressing and subsequent handling.	GOP – hygienic dressing, cutting and boning.

Risk Factor	Source or Cause of risk Factor	Control Measure
	Micro growth due to improper time/temperature control.	GOP – time/temperature control, proper refrigeration.
Wholesomeness defects (e.g. hair).	Improper dressing techniques.	GOP - hygienic dressing.
Green runners.		
Spoilage.	Micro growth due to improper time/temperature control.	GOP – time/temperature control, use of metabisulphite.

5.10 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 9.

Form 9: Summary of Identified Risk Factors and Controls Related to False or Misleading Labelling

Risk Factor	Source or Cause of Risk Factor	Control Measure(s)
All products.		
Incorrect details on label or transportation outers, e.g. • species • claims (e.g. Halal, organic) • product description • lot id • storage directions.	Incorrect label design.	Procedures for ensuring correct label design.
	Wrong label put on carton or pack.	Procedures for ensuring correct packaging of products.

5.11 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, operator-defined limits, GMP requirements, and 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 10.

Form 10: 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).	Microbiological testing as set out in the NMD programme.	xxx
Cusum inspection for defects.	Inspection of cuts for defects.	xxx
Internal audits.	Internal audit involving: • review of records • review of test results • reality checks.	xxx
Review of RMP including supporting systems.	Review of effectiveness of RMP. Re-assessment of RMP (e.g. identification of new hazards; changes in critical limits, process steps and procedures, inputs).	xxx
Other activities related to the verification of CCPs, regulatory limits, operator-defined limits, and supporting systems.		