NEW ZEALAND FOOD SAFETY AUTHORITY

Te Pou Oranga Kai O Aotearoa

13 December 2002

Dear Poultry Processor

NZFSA/ PIANZ Guidance and Generic RMP

1. Draft 7 of "Guidance and Generic Risk Management Programme for Slaughter and Dressing of Broilers" Issued

The New Zealand Food Safety Authority and PIANZ jointly announce that draft 7 of the above document is now available. Refer to www.nzfsa.govt.nz/animalproducts/publications

2. Consultation Period (6 Months)

This document will be finalised by the Director (Animal Products), NZFSA, and the Executive Director, PIANZ, after the consultation period of six months has passed and after due consideration has been given to any recommendations and legislative changes affecting the document.

Please send recommendations for changes, **no later than 30 June 2003**, to:

The Executive Director
PIANZ
Level 1, 96D Carlton Gore Rd
AUCKLAND 1001

Yours sincerely

Judi Lee
Assistant Director
Animal Products Group
NZ Food Safety Authority
PO Box 2835
Wellington

Michael Brooks
Executive Director
Poultry Industry Association of New Zealand
Level 1, 96D Carlton Gore Rd
AUCKLAND 1001

Guidance and Generic Risk Management Programme For Slaughter and Dressing of Broilers

Notice of Copyright

Important Disclaimer

This publication is not a legal interpretation of the Animal Products Act 1999 or the Animal Products (Ancillary and Transitional Provisions) Act 1999. Nor is it produced for the purpose of giving professional advice of any nature. While every effort has been made to ensure the information in this paper is accurate, the Crown its employees and consultants do not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion which may be present, however it may have occurred, nor for the consequences of any decision based on the information in this publication.

Without in any way limiting the above statement, the Crown, its employees and consultants expressly disclaim all and any liability to any person in respect of anything, and the consequences of anything, done or omitted to be done in reliance, whether wholly or partly, upon the whole or any part of the contents of this publication.

Review of Generic Risk Management Programme

This programme shall be reviewed as necessary by NZFSA. The coordinator welcomes suggestions for alterations, deletions or additions to this programme, to improve it. Suggestions should be sent to the coordinator on the form on Page P-2, together with reasons for the change and any relevant data.

The coordinator of this programme is:

Assistant Director (Animal Product Standards)
Animal Products Group
NZ Food Safety Authority
P O Box 2835
Wellington
Telephone: 04 463 2500
Facsimile: 04 463 2643

Suggestions for Change: Generic Risk Management Programme for Slaughter and Dressing of Broilers

Name Organisation Address Email Phone Facsimile	
Section	Suggested Improvements
Signature	Date
Please post to: Assistant Director (Animal Product Standards) Animal Products Group NZ Food Safety Authority P O Box 2835 Wellington	Acknowledgement of receipt: Signature: Date:

Amendment Record

Amendments do not become part of this programme until they have been authorised by the Director, Animal Products, and issued with an amendment form. Amendments to this programme will be given a consecutive number and dated. Amendments to the programme can be identified by the version number in the page header. Please ensure that all amendments are inserted, obsolete pages are removed and the record below is completed.

Amendment No:	Date	Entered by:
Draft 7		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		

Contents

Page

Contents Page

1 Introduction

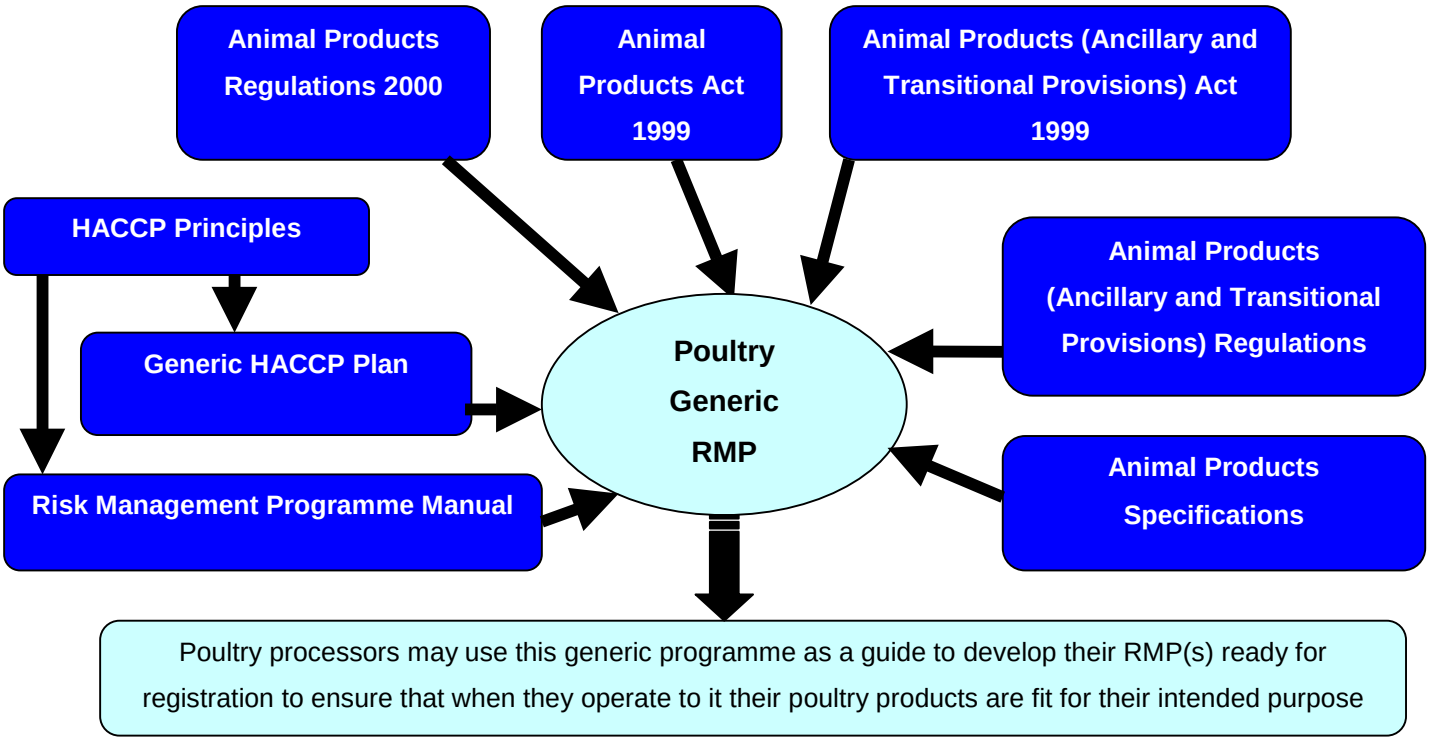
1.1 PURPOSE OF THIS GENERIC RMP

The Animal Products Act 1999 requires primary poultry processors to operate in accordance with one or more registered risk management programmes. **An operator's registered risk management programme (RMP) will be "legally binding".**

This generic RMP has been produced by an industry working group in conjunction with the New Zealand Food Safety Authority (NZFSA) to help primary poultry processors to develop an acceptable RMP.

This programme:

- has been based on HACCP (Hazard Analysis and Critical Control Point) principles,
- complies with the requirements of the Animal Products Act 1999 (and its associated regulations, standards and specifications relevant to poultry),
- can be used as a foundation for a poultry processor's RMP, and
- aims to produce poultry that is fit for its intended purpose.

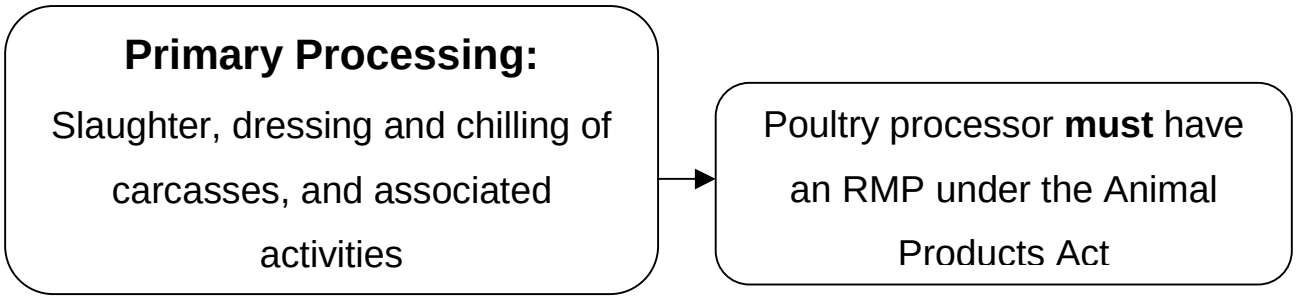


1.2 SCOPE OF ANIMAL PRODUCTS ACT 1999 AS IT APPLIES TO POULTRY

1.2.1 Primary processing

The Animal Products Act requires all poultry processors to have a risk management programme covering their 'primary processing' activities. Primary processing includes:

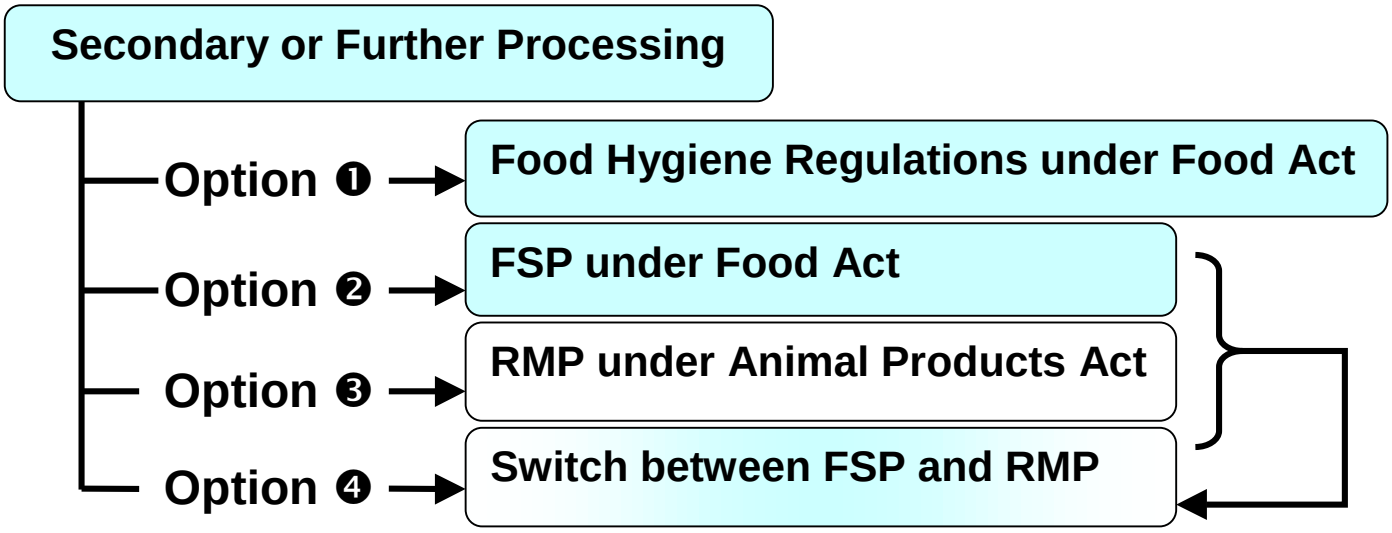
- presentation of healthy birds for slaughter (under a whole flock health scheme),
- slaughter and dressing of broilers,
- chilling of the clean dressed carcasses,
- production of any products or by-products intended for animal consumption as a result of the primary process.



1.2.2 Secondary processing

A poultry processor that performs secondary processing, e.g. portioning, deboning, has a number of options for this part of their process as shown in the bullets and diagram below. They can:

1. Stay under the current Food Hygiene Regulations (FHR), or
2. Operate under a Food Safety Programme (FSP), or
3. Operate under a Risk Management Programme (RMP), or
4. Switch between options 2 and 3 as appropriate.



1.3 OTHER INFORMATION

1.3.1 RMP help desk

Contact Bryan Anderson, Ph 03 214 3594, Fax 03 214 4325, Email: andersonb@maf.govt.nz

1.3.2 Web site

The following information is on NZFSA's web site at www.nzfsa.govt.nz/animalproducts/ :[1]

- Bulletins;
- Manuals/Guides:
  - Exporters Guide
  - Risk Management Programme Manual
- Overseas Market Access Requirements
- Amendments;
- Registers and Lists;
  - Risk Management Programmes Register
  - Transport Operators List
- Application Forms;
  - Exporter Registration – Application Form AP1
  - Identification numbers
  - Registration of Risk Management Programme – Application Form AP4
- Legislation:
  - Acts
  - Regulations;
  - Notices (This is where you find specifications); and
  - Orders
- Policy Statements;
- Glossary of terms;
- Information pamphlets;
- Discussion Documents;
- Letters to affected parties.

There is also a generic HACCP plan for slaughter, dressing, portioning and deboning of Chicken[2] (broilers) at http://www.nzfsa.govt.nz/meatdoc/meatman/haccp/meat/haccp_v2_appix-4.pdf. The technical annex associated with this plan is also particularly useful and has been used as a guide when establishing hazards of concern within the processes in the generic RMP in section 2.

1.3.3 Hard copies

Documents are also available through Manor House Press Ltd, phone 04 568 6071 or 04 568 89 14. Ask for a quote first as it may be expensive for a single printing.

[1] This list will change. To be notified of changes, select "notification of updates to the site" on the animal products page and follow the instructions.

[2] If an operator already has a HACCP plan for the control of hazards within the process, this can be incorporated into the relevant part of the RMP by reference or by inserting the actual plan.

1.4 WHAT IS A RISK MANAGEMENT PROGRAMME (RMP)?

A risk management programme is a programme designed to both -

(a) Identify; and

(b) Control, manage, and eliminate or minimise -

hazards and other risk factors in relation to the production and processing of animal material and animal products, in order to ensure that the resulting animal product is fit for intended purpose.

Risk management programmes must include the application of Hazard Analysis and Critical Control Point (HACCP) principles.

Risk factors may relate to the nature of the animal material or product concerned, or to the preparation, production, processing, distribution, trade, or intended use of the animal material or product. These risk factors include:

- risks from hazards to human health;
- risks from hazards to animal health;
- risks from false or misleading labelling; and
- risks to the wholesomeness of animal material or product.

Overseas market access requirements and commercial quality issues are not required to be part of the risk management programme.

1.5 DEVELOPMENT OF AN RMP

The components in a poultry processor's risk management programme are summarised in the diagram on the next page.

Section 2 of this generic RMP gives a brief summary of each RMP component, followed by an example of one way that the component may be documented (as relevant to the slaughter and dressing of broilers). Other formats are equally acceptable. Further guidance is available in section 3 of the Risk Management Programme Manual. This can be found on NZFSA's web site www.nzfsa.govt.nz/animalproducts/publications/manualsguides/

1.6 RISK MANAGEMENT PROGRAMME COMPONENTS

Management authorities and responsibilities

Scope

Product description and intended purpose

Fitness for intended purpose
= product outcomes for hazards and other risk factors:

- Risks from Hazards to Human Health
- Risks from Hazards to Animal Health
- Risks to Wholesomeness
- Risks from False or Misleading Labelling

Process / operation description

Identification and analysis of hazards to human and animal health

Control of hazards

Identification and analysis of other risk factors
(risks to wholesomeness and false or misleading labelling)

Control of other risk factors

Operational authorities and responsibilities

Generic corrective action procedure

Recall procedures

Operator verification

Provision for external verification

Documentation and record-keeping

Extra procedures to meet other regulatory requirements

1.7 LABELLING REQUIREMENTS

The Food Standards Code takes full effect on 20 December 2002. It replaces the Australian Food Standards Code and most of the Food Regulations 1984. It was developed by Food Standards Australia and New Zealand (FSANZ) –and will be administered (including enforcement) by NZ Food Safety Authority.

The following information has been prepared to assist poultry processors meet the new labelling requirements. It guides those making decisions about package labelling for a **fresh chicken in a bag** intended for retail sale. See the disclaimer below. It is intended as guidance only. For information on other types of products and more detail on the changes:

- Check the Food Standards Australia New Zealand website;
  http://www.foodstandards.govt.nz/foodstandardscode/
- Contact the FSANZ Help-line – 0800 441 571;
- Contact a Health Protection Officer at the local District Health Board;
  http://www.nzfsa.govt.nz/processed-food-retail-sale/general/food-safety-coordinators.pdf
- Seek specialist advice from a lawyer or a consultant.
  http://www.nzfsa.govt.nz/processed-food-retail-sale/general/food-safety-consultants.pdf

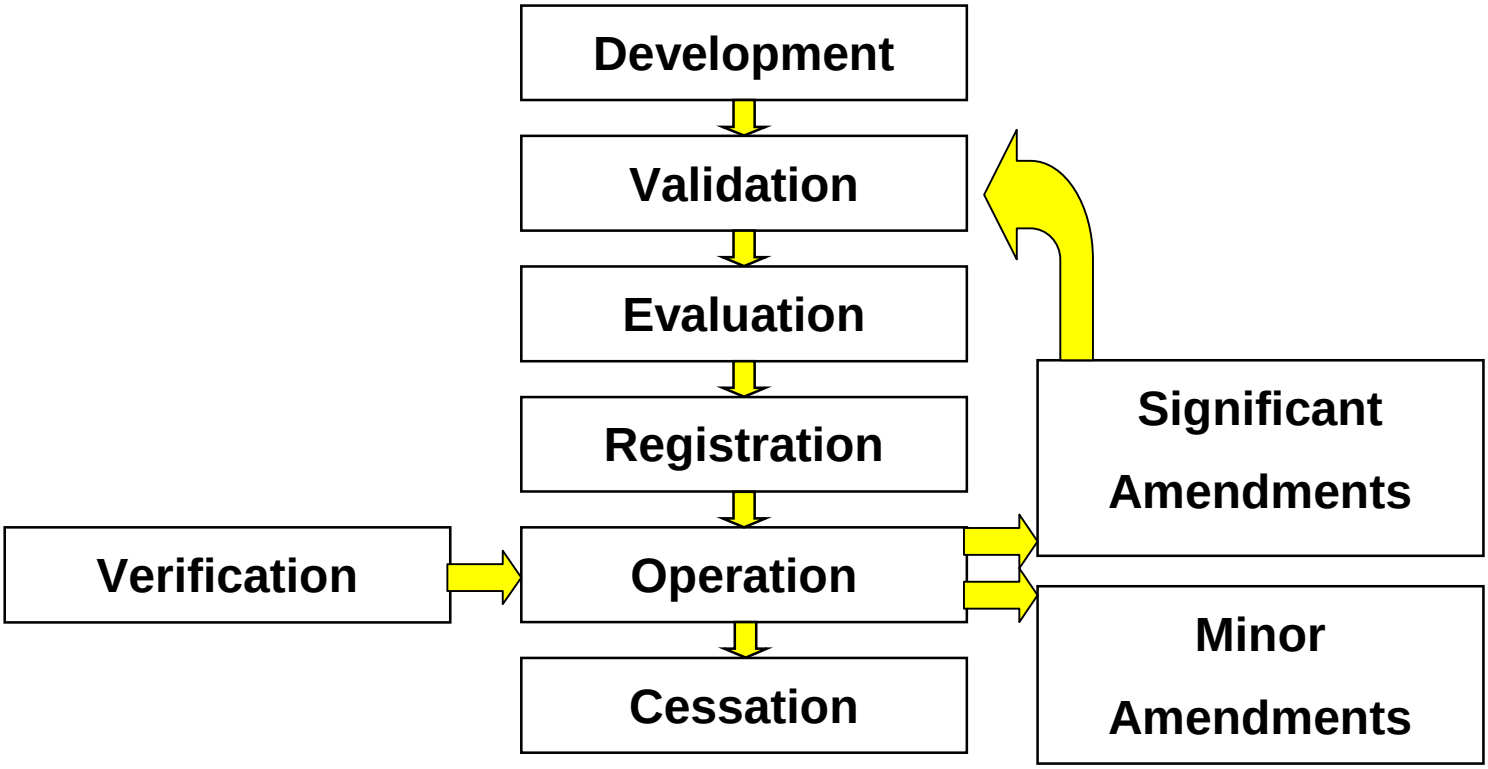
Food Standards Code requirements

Clause	
1.2.2	**Food Identification Requirements** The name of the product (chicken) must appear along with a lot or batch number (which could be a date mark – see below) and the name and address of the supplier. Note that the principal display panel concept no longer applies.

Clause	
1.2.3	**Mandatory Warning and Advisory Statements** Not likely to apply to fresh poultry – unless specific ingredients mentioned in this standard are added.
1.2.4	**Labelling of Ingredients** This standard requires all ingredients to be listed and strengthens requirements for additives to be identified. Exemptions are flavourings (per Schedule 5), volatile processing additives which are completely removed, added water (IN SPECIFIC CIRCUMSTANCES ONLY!) and processing aids used in accordance with 1.3.3.
1.2.5	**Date Marking** A date mark is required for fresh poultry. This must be a use-by date (for safety purposes) or a best-before date (for quality purposes). Note that it becomes illegal to sell product once the use-by date has elapsed. This is not the case for best-before dates.
1.2.6	**Directions for Use and Storage** Appropriate directions must be given both to ensure the product is suitable until the date mark (e.g. keep refrigerated) and for health and safety reasons (e.g. store in bottom of refrigerator, wash hands after handling raw product, cook thoroughly until juices run clear, etc).
1.2.8	**Nutrition Information Panel (NIP) Requirements** A chicken in a bag as a single ingredient food is exempt from the requirement to have a NIP unless nutritional claims (e.g. low in fat) are made.
1.2.9	**Legibility Requirements** Labelling must be legible, prominent and in English. This is slightly more liberal the Food Regulations. Note that any warning statements (see 1.2.3 above) are required to be a minimum of 3mm.
1.2.10	**Characterising Ingredient** Not applicable to single ingredient foods.
1.4	**Contaminants and Residues** Set maximum levels for certain substances in certain foodstuffs – no labelling implications. Read in conjunction with NZFSA specifications which should not contradict or overlap.
1.6.1	**Microbiological Limits for Foods** None are stated for raw poultry.
2.8	**Food Product Standards** Eviscerated poultry may include gizzard, heart, liver, neck or a combination of these. Uneviscerated poultry must not be frozen.
2.2.1	**Thawed Poultry** This provision has changed from the previous of not greater than 106% thawed (Food Regulation) requirement to poultry when thawed must yield no more than 60g/kg of fluid.

1.8 WHAT HAPPENS NEXT?

After the risk management programme has been developed, implemented and validated the operator must then get an accredited evaluator to evaluate the validity of the risk management programme prior to applying to register it. When the programme is registered it becomes a legally binding document that the operator must comply with.



The operator must pay application fees for registration, amendment or update of the risk management programme. NZFSA will also charge the operator an assessment charge (calculated on an hourly basis) for the time involved in assessing applications.

Contractual arrangements regarding payment for the services of accredited persons such as evaluators and verifiers are the operator's responsibility.

Risk management programme tasks and responsibilities

Tasks	Responsibility:	For more info refer to:
Development		Sections 1 to 3 of RMP Manual
• Development of the programme.	• Operator	
Validation		Section 4 of RMP Manual
• Validation of the programme	• Operator	
Evaluation		
• Contracting an evaluator to obtain recommendation for approval of registration (recognition of the validity) of the programme.	• Operator	Section 5 of RMP Manual
• Evaluating and reporting on the risk management programme's validity.	• Accredited evaluator	Evaluator's guide and specification
Registration		Section 6 of RMP Manual
• Naming the verification agency that has indicated its willingness to verify the registered risk management programme.	• Operator	
• Application for registration of the risk management programme.	• Operator	
• Registration of the risk management programme.	• Director, Animal Products	
Operation		Section 7 of RMP Manual
• Contracting verification services to be used for verifying the registered risk management programme.	• Operator	
• Implementation of the programme.	• Operator	
• Specific operational duties.	• Operator	
• Operator verification	• Operator	Section 7.2.3 of RMP Manual
• External verification.	• Accredited verifier	Verifier's specification
• Application for amendments to registered risk management programme.	• Operator	
• Notification of minor amendments to the Director, Animal Products, as required.	• Operator	
Cessation		Section 8 of RMP manual
• Surrender of the registration of the risk management programme	• Operator	
• Suspension of registration	• Director, Animal Products, and Director-General	
• Deregistration	• Director, Animal Products, and Director-General	

2 Generic risk management programme

This programme is indicative only. Each operator that uses it, must tailor it to suit their own situation. Alternative formats are acceptable so long as all of the required components are present and relevant Animal Products regulations and specifications are met. The basis for the hazard identification in this programme is given in the annex to MAF's (NZFSA's) Generic HACCP Plan for Slaughter and Dressing of Broilers. Refer to the NZFSA web site at www.nzfsa.govt.nz/meatdoc/meatman/haccp/ Page IX.4.32.

2.1 MANAGEMENT AUTHORITIES AND RESPONSIBILITIES

The poultry processor must document details regarding the business operator and the person who is responsible for the day-to-day management of the RMP. The poultry processor should document a deputy for the day-to-day management of the risk management programme (to cover for holidays and absences). It is useful to capture a training summary for the individuals here as well.

Example A: Management authorities and responsibilities

	Details	**Training**
Name of the business operator. **Operator's legal representative**	123 Poultry Ltd Polly Perfect	 HACCP awareness training
Business Identifier[3]:	Perf1	
Contact details: **Postal (as listed at Companies Office):** **Physical:** **Phone / Fax:** **Email:**	 PO Box 1 Perfectville 17 Perfect Place Perfectville (09) 100-0000 / (09) 100-0001 123.co.nz	
Name, position or designation of person responsible for day-to-day management of the registered RMP	Technical Manager Back-up = Technical Officer	[4]NZ Qualifications Authority Unit Standard 19515: Development and Implementation of risk management programmes under the Animal Products Act

[3] The Identifier must not be the same as exporter ID, and must be a number or a number/letter combination of at least 3 and not more than 10 characters; at least one character as a number; no leading zeros.

[4] Alternative training is equally acceptable.

2.2 SCOPE OF THE RISK MANAGEMENT PROGRAMME

The operator must define the scope of each RMP. There may be a stand-alone RMP for each:

- type of animal material or product;
- type of process or operation;
- set of premises or place;

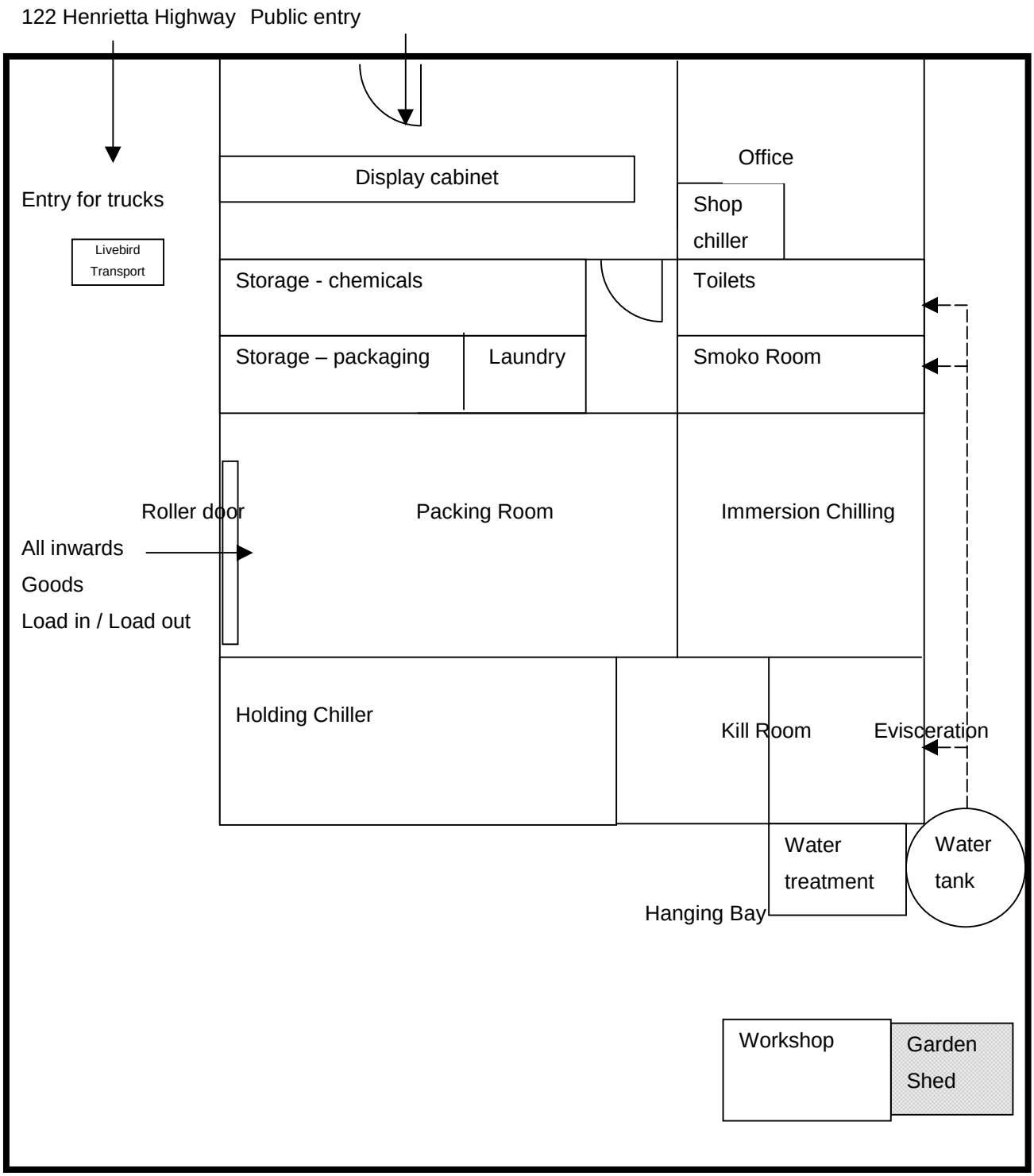
or there may be a larger RMP relating to one or more materials.

Example B: Scope of the Risk Management Programme

	Scope of Risk Management Programme
Type of premises or place	Poultry processing plant.
Physical boundaries	Refer to site map (to be attached).
Start of RMP	From receipt of live birds.
Process or processes.	Slaughter, dressing and initial cooling of broiler chickens. Processing of edible offal. Processing of material for rendering and pet food.
End of RMP	To the packing and refrigeration of wholebirds.
Animal materials being processed.	Broiler chickens.
Animal products being produced.	1. Whole chicken. 2. Edible offal. 3. Material for pet food. 4. Material for rendering.
Which of the risk factors are covered and which are not applicable.	All of the following risk factors are included: • risks from hazards to human health; • risks from hazards to animal health; • risks from false or misleading labelling; and • risks to the wholesomeness of animal material or product.

Physical boundaries of the RMP:

All areas inside the dark line apart from the Garden shed (shaded) are included in the RMP.



2.3 ANIMAL PRODUCT DESCRIPTION AND INTENDED PURPOSE

The RMP must describe the animal product(s) to which it applies, either individually, or as product groups with similar processes and intended purposes.

Example C: Product description

Product	Raw Whole Chicken	Edible Offal	Material for Pet Food	Material for Rendering
Intended uses	Further processing into manufactured products, retail products, food service items. Cooked by consumer.	Further processing into manufactured products, retail products, food service items. Cooked by consumer.	Either raw or further processed.	Rendered (feathers hydrolysed) into meals for use in compound feed.
Intended consumer	Humans: General public.	Humans: General public.	Animals: Domestic pets.	Animals: Farm animals.
Important product character-istics	Has passed ante and post-mortem systems. Meets company / regulatory requirements.	Has passed ante and post-mortem systems. Meets company / regulatory requirements.	Meets company / regulatory specifications.	Meets company / regulatory specifications.
Labelling	As per Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 and Storage and cooking guidelines.	As per Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 and Storage and cooking guidelines.	Not for human consumption.	Not for human consumption.

NB: There are company specifications for packaging, shelf-life, storage and distribution. These comply with all relevant regulatory specifications.

Each product group has a separate section covering a set of RMP components as described below:

Section	**2.4**	**2.5**	**2.6**[5]
Product	**Whole Birds**	**Edible Offal**	**Material for Pet Food or Rendering**
Product Outcomes	Example D1	Example D2	Example D3
Process Flow Diagram	Example E1	Example E2	Example E3
Identification of Hazards from Inputs	Example F1	Example F2	Example F3
Hazard Analysis and CCP Determination for Process	Example G1	Example G2	Example G3
Hazard Control	Example H1	Example H2	Example H3
Identification and Control of Risks to Wholesomeness	Example I1	Example I2	Example I3
Identification and Control of Risks from False or Misleading Labelling	Example J1	Example J2	Example J3

The hazards and other risk factors and associated CCPs identified by individual premises may differ from those identified in this generic programme due to variations in a number of factors such as:

- adequacy of whole flock health scheme,

- different products, processing procedures and parameters,

- equipment,

- premises design, and

- effectiveness of supporting systems.

It is very important that individual premises customise their hazard identification and analysis.

[5] The processes that were documented for material for pet food and material for rendering were almost identical so these products have been analysed together. If an operator has different processes for each product then they will need to develop a product module for each one.

2.4 PRODUCT MODULE - RAW WHOLE CHICKEN

Example D1: Product outcomes - Raw whole chicken

1. Hazards to Human Health:

Hazard[6,7]	Aim of RMP	Product Outcome[8]	Control measures	Response if outcome not met
B: Enteric pathogens, e.g. Salmonella spp., Campylobacter jejuni[9], Clostridium spp., Listeria monocytogenes[10]	To minimise presence of Salmonella on the product.	Salmonella positive carcasses < X% over last Y samples. Sampling as per NMD programme.	HC Specs[11], clause 41: Suppliers of farmed poultry to have a Whole Flock Health Scheme. Decontamination during processing. Other controls outside scope of RMP: - Feedmilling (inputs, pelleting, use of inhibitors etc.) - Livestock (biosecurity and hygiene). - Proper cooking before consumption.	Review RMP especially Whole Flock Health Scheme. Review *E. coli* test results to see whether processing hygiene can be improved to minimise cross contamination. Further action as appropriate.

[6] Hazards have been coded as follows: B = Biological hazard, C = Chemical hazard, P = Physical hazard.

[7] National Microbiological Database (NMD) data will provide information on levels achievable for carcasses after slaughter and dressing. Individual premises are expected to assess their own NMD results when setting microbiological targets within the national guidelines, and considering on-farm practices and seasonal factors.

[8] Actual targets are to be inserted by the operator wherever a "letter" indicates this, e.g. X%, Y samples.

[9] At present, there is insufficient information on *C. jejuni* to establish outcomes for raw poultry. It is unlikely that adequate information will be available in the near future due to uncertainties in current microbiological methodology and controls. Poultry processors should provide those handling raw chicken with information (on labels, in handouts or on web sites) about storage temperatures, cooking temperatures and correct handling to avoid cross contamination from raw poultry to other foods.

[10] Similar to above.

[11] HC Specs = Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002.

Hazard[6,7]	**Aim of RMP**	**Product Outcome**[8]	**Control measures**	**Response if outcome not met**
B: as above	To minimise numbers of enteric pathogens on product	E. coli (as indicator):[12] n = A c = B m = C $\log_{10}$CFU/mL M = D $\log_{10}$CFU/mL Sampling as per NMD programme.	Good hygienic practices throughout processing. Correct set up of evisceration equipment. Use of multiple bird washes and counterflow immersion chillers containing antimicrobial agent.	Review GHP, set up of evisceration equipment, effectiveness of bird washes, set up of immersion chiller etc. Further action as appropriate.
C: Chemical residues, e.g. anthelmintics, antibiotics, heavy metals, environmental contaminants	N/a	None[13]:	N/a	N/a
P: Physical hazards: None identified.	N/a	N/a	N/a	N/a

2. Hazards to animal health:

N/a as product is intended for human consumption.

[12] n = no. of samples in lot, c = no. of results that may be above m, M = absolute maximum. C and D are targets that are to be specified by each operator based on performance history.

[13] These residues usually arise from incorrect use of animal remedies and agricultural compounds, (e.g. pesticides) in the livestock operation. These hazards should be controlled to acceptable levels by the supplier's Whole Flock Health Scheme under Spec 41 of HC Specs[11]. Broiler processors that participate in the National Residue Monitoring Scheme get results that can indicate a need for corrective action by the live bird or feed supplier. Product outcomes for this hazard are not necessary in the RMP as there are no controls within the RMP that impact on the residue level.

3. False or misleading labelling[14]

Risk Factor	Aim of RMP	Product Outcome	Control measures	Response if outcome not met
L: Incorrect label design.	To ensure products are true to label.	All products shall be true to label and shall meet Spec 32 of HC specs, and Regulation 8 of the Animal Products Regulations 2000.	Label design.	Review label design and approval process.
L: Product does not match label.	To ensure products are true to label.	All products shall be true to label and shall meet Spec 32 of HC specs, and Regulation 8 of the Animal Products Regulations 2000.	Check correct label applied at point of application.	Review labelling procedures. Any material of unknown status is to be downgraded for rendering or pet food processing as appropriate.

[14] Risks of false or misleading labelling have been coded with an L.

4. Risks to wholesomeness[15]

Risk Factor	Aim of RMP	Product Outcome[16]	Control measures	Response if outcome not met
W: Runts.	To minimise unwholesome product	Less than E%.	Cull on arrival – do not hang on kill line.	Increase level of monitoring of control measures. Review Whole flock Health Scheme. Review machine settings. Review processing procedures. Rework product that is still on site where appropriate.
W: Broken bones, excessive bruising		Less than F%.	Staff training. Correct bird numbers in crates. Equipment set up. Post-mortem inspection at various points in the process. Final product inspection.	
W: Skin Lesions		Less than G%.	Identify during inspection at various points in the process. Trim affected areas.	
W: Red birds		Less than H%.	Identify during inspection at various points in the process. Dump.	
W: Extraneous poultry matter (EPM)		Less than I%.	Equipment set up. Identify during inspection at various points in the process. Remove EPM.	
W: Incomplete removal or breakage of viscera		Less than J%.	Equipment set up. Identify during inspection at various points in the process. Remove viscera. Trim affected areas.	

[15] Risks to wholesomeness have been coded with a W.

[16] E - J are targets that are to be specified by each operator based on performance history.

Example E1: Process flow diagram - Raw whole chicken

		Outputs	
Inputs	**Process steps**	**Human Consumption**	**Animal Consumption**
Live birds	1. Receipt of live birds		
	2. Hanging		
	3. Stunning		
	4. Killing		
	5. Bleeding		➔ Blood for rendering[i]
Steam made from ➔ potable water	6. Scalding		
	7. Defeathering		➔ Feathers for rendering[i]
Water with bactericidal agent[ii] ➔	8. Washing[ii]		
	9. Head pulling	➔ Head[iii]	➔ Head for rendering[i]
	10. Hock cutting	➔ Feet [iii]	➔ Feet for pet food[iv] or rendering[i]
	11. Venting		
	12. Evisceration	➔ Edible offal (liver, gizzard, heart)[v]	➔ Inedible offal, plus unwanted edible offal[i, iv]
Water with bactericidal agent[ii] ➔	13. Washing[ii]		
	14. Crop removal		➔ Crops for rendering[i]
	15. Neck cracking/cutting of neck flap	➔ Necks [iii]	➔ Necks for pet food[iv] or rendering[i]
Water with bactericidal agent[ii] ➔	16. Washing (inside/outside wash) [ii]		
Water with bactericidal agent[ii]/ice ➔	17. Immersion chilling or combination chilling[vi]		
	18. Rehanging[vii]		
	19. Drip Line[viii]		
	20. Drop Bin		
Wholebird bags & metal clips ➔	21. Bagging		
Cardboard cartons & strapping or tape ➔	22. Cartoning		
Labels ➔	23. Labelling		
	24. Blast Chill/Freeze		
	25. Chill or Freezer Store	➔ Packed whole bird	

[i] To example E4.

[ii] The number and location of washing steps in the process and the use of permitted bactericidal agents (e.g. chlorine) will vary from premises to premises. Individual premises should consider the impact of any washing step during hazard analysis.

[iii] Premises that collect heads, feet and necks as edible products must do a hazard analysis for these products and establish control measures to address any identified hazards. These products, when collected for human consumption, will not be considered further in this generic plan. The plan covers these products when added to other by-products for animal consumption.

[iv] To example E3.

[v] To example E2.

[vi] Combination chilling consists of immersion chilling followed by holding in a freezer or chiller to complete the chilling process prior to secondary processing.

[vii] Rehanging often involves grading (sending defective product to cut-up so that the quality defects can be removed), at this step the wholesomeness of products may also be evaluated for the final time in the primary processing area.

[viii] In some operations the split between true primary and secondary processing occurs here and the scope of the RMP may be limited to this. In practical terms most operations would complete the processing of the whole bird in one area and would prefer to have this all under one regulatory regime so the "primary" process has been extended to take this into account.

Example F1: Identification of hazards from inputs - Raw Whole Chicken

Raw material component	Biological hazard [ix],[x]	Chemical hazard	Physical hazard
Live bird	B[xi] [xii]- Enteric pathogens, e.g. *Salmonella* spp., *Campylobacter jejuni*, *Clostridium* spp., *Listeria monocytogenes*	C: Chemical residues, e.g. anthelmintics, antibiotics, heavy metals, environmental contaminants	None
Water with permitted bactericidal agent (e.g. chlorine)	None	C: Chemical residues e.g. from use of unapproved chemicals	None
Ice	B: Microbiological hazards associated with non-potable water e.g. Enteric pathogens	C: Chemical hazards such as those found in non-potable water, e.g. heavy metals.	None
Product contact packaging[xiii]	None	C: Chemicals from plastic.	None
Non-product contact packaging [xiv]	None	None	None

[ix] Live birds affected with systemic bacterial infection or septicaemia generally exhibit obvious clinical signs of the disease. Diseased birds are likely to be culled while still on the farm.

[x] At present, there is insufficient information on *Salmonella*, *C. jejuni* and *L. monocytogenes* on raw poultry to serve as basis for establishing food safety objectives for raw poultry. The implementation of the National Microbiological Database (NMD) programme for broilers is expected to provide information for establishing microbiological targets for *Salmonella*. However, for *C. jejuni* and *L. monocytogenes*, it is unlikely that adequate information will be available in the near future due to uncertainties in microbiological methodology and controls.

[xi] Hazards and other risk factors have been coded as follows: B = Biological hazard, C = Chemical hazard, P = Physical hazard, W = Wholesomeness issue, L = Labelling issue, and the numbers have been allocated sequentially as each different risk factor has been identified.

[xii] Localised pathological abnormalities may occur sporadically in internal organs of chicken. There are, currently, no national data available on the pathology of broilers in New Zealand. Anecdotal evidence from industry suggests that pathological abnormalities are rarely observed on internal organs of broilers grown under a whole flock health scheme. An inspection system and disease and defects surveys are currently being developed by NZFSA and industry which will provide information on the levels of pathology on carcasses and offal. If individual premises have a history of lesions etc "reasonably likely to occur" then they should use that info to identify risk factors here.

[xiii] Plastic bag or liner.

[xiv] Metal clips, cardboard cartons, strapping, tape, labels.

Example G1: Hazard analysis and CCP determination for raw whole chicken processing[17].

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[18] at unacceptable levels[19] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard or reduce/eliminate the hazard / to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
1. Receipt of live birds	Live bird	B: Enteric pathogens		Yes	External surface of bird is likely to be contaminated with unacceptable levels of pathogens.	No	No	
		C: Chemical residues		No[20]				
2. Hanging	Live birds	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
3. Stunning	Live birds	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
4. Killing	Live birds	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	

[17] Hazard analysis may result in changes to the initial product outcomes set earlier. Confirm outcomes after this analysis.

[18] Product is defined as the edible component of final product.

[19] Unacceptable - as demonstrated by data (scientific literature, applied research or on-site experience) associated with achieving the product outcomes established for the process. In the determination of unacceptability, hazards should be considered in terms of level; frequency; transfer and redistribution; severity of effect on consumer.

[20] Most control measures for addressing potential hazards associated with chemical residues are applied in the livestock production system under a Whole Flock Health Scheme. NZFSA maintains a Broiler Chemical Residue Monitoring Programme that monitors the residue status of birds slaughtered for human consumption. These controls mean that this hazard is only likely to occur at acceptable levels and this is unlikely to change given the nature of the processing involved, so this is not considered further in this HACCP plan, except at the last step to show that it may still be present.

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[18] at unacceptable levels[19] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard or reduce/eliminate the hazard / to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
			B: Contamination of the cut area	No				
5. Bleeding	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
6. Scalding	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
	Steam			No				
			B: Contamina-tion from used scald water	No				
7. Defeathering	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
			B: Cross-contamination	Yes	Potential increase in incidence of pathogens on carcasses.	No	No	
8. Washing	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	Yes – effective washing will reduce microbiological contamination from previous step (part of system CCP1).	No	1a
9. Head pulling	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
10. Hock cutting	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
11. Venting	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[18] at unacceptable levels[19] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard or reduce/eliminate the hazard / to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
11. Venting			B: Contamination from the GIT	Yes	Faecal contamination due to gut breakage is likely to result in an unacceptable increase in the incidence and levels of pathogens on carcasses and edible offal. Refer to Annex, Section 5.3.	No	No	
12. Evisceration	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
			B: Contamination from the GIT	Yes	Faecal contamination due to gut breakage is likely to result in an unacceptable increase in the incidence and levels of pathogens on carcasses and edible offal	No	No	
13. Washing	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	Yes - effective washing will reduce microbiological contamination from previous steps (part of system CCP1).	No	1b
14. Crop removal	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[18] at unacceptable levels[19] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard or reduce/eliminate the hazard / to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
			B: Contamination from the crop	Yes	Contamination due to crop breakage is likely to result in an unacceptable increase in the incidence and levels of pathogens on carcasses and edible offal.	No	No	
15. Neck cracking/ cutting of neck flap	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	
16. Washing (inside/outside wash)	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	Yes - effective inside/outside washing will reduce microbiological contamination from previous steps (part of system CCP1).	No	1c
17. Immersion chilling/ combination chilling	Carcass	B: Enteric pathogens		Yes	Hazards carried over from previous step.	Yes - effective chilling and use of a permitted bactericidal agent can reduce micro-biological counts on carcasses	Yes - washing at previous steps particularly at step 16	2
17. Immersion / combination chilling			B: Cross-contamination	Yes	Immersion chilling can result in an unacceptable increase in incidence of pathogens on carcasses.	Yes - effective chilling and use of a permitted bactericidal agent (e.g. chlorine) can minimise cross-contamination	Yes - washing at previous steps particularly at step 16	2
18. Rehanging	Carcass	B: Enteric pathogens		No				

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[18] at unacceptable levels[19] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard or reduce/eliminate the hazard / to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
19. Drip Line	Carcass			No				
20. Drop Bin	Carcass			No				
21. Bagging	Carcass			No				
	Plastic bag	C: Transfer of chemicals from plastic to product.		No	Only bags meeting Specs for human consumption are purchased.			
		B: Enteric pathogens	B: Packaging stored below raw material lines can be contaminated	No	Good hygienic practice ensures this does not happen			
	Metal Clip	None		No[21]				
22. Cartoning	Cardboard Box	B: Enteric pathogens	B: Packaging stored below raw material lines can be contaminated	No	Good hygienic practice ensures this does not happen			

[21] Issues with product contact materials are covered by a supporting system.

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[18] at unacceptable levels[19] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard or reduce/eliminate the hazard / to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
	Strapping or tape	None		No				
23. Labelling	Label			No[22]				
24. Blast Chilling or Blast Freezing	Carcass			No				
25. Chiller or freezer storage	Carcass			No				
		C: Chemical residues		No[23]				

[22] Labelling is covered by in a later section.

[23] Most control measures for addressing potential hazards associated with chemical residues are applied in the livestock production system under a Whole Flock Health Scheme. NZFSA maintains a Broiler Chemical Residue Monitoring Programme that monitors the residue status of birds slaughtered for human consumption. These controls mean that this hazard is only likely to occur at acceptable levels and this is unlikely to change given the nature of the processing involved, so this is not considered further in this HACCP plan.

Example H1: Hazard summary spreadsheet for raw whole chicken

Process step	Hazard ID	CCP no.	Critical limits[24]	Monitoring[25]	Corrective actions[26]	Verification[27]	Records[28]
8, 13 & 16. Washing steps	B: Enteric pathogens	1a, b, c	Specified washing parameters that will achieve or contribute to the achievement of specified microbiological targets for carcasses, i.e. - complete carcass coverage by showers - water pressure adequate to remove visible extraneous material - specified concentration of bactericidal agent (e.g. chlorine), if used	Person responsible to check and record washing parameters at specified frequency, i.e. - check carcass coverage - check presence of extraneous material on predetermined number of washed carcasses - measure concentration of bactericidal agent, if used	Correct washing parameters. Increase frequency of monitoring. Review adequacy of operational and/or monitoring procedures.	Product outcome validation Product testing (e.g. microbiological) Water testing Calibration of measuring equipment Internal audit Extrinsic audit (e.g. regulator, client) Client feedback HACCP review	Validation records Daily monitoring records Corrective action reports Analytical test reports Calibration records Internal audit reports Extrinsic audit reports Client feedback records HACCP review records

[24] Operators are expected to put in their own limits for each relevant parameter listed below.

[25] Define who, what, when, where and how. Monitoring frequencies should be set so that time periods between monitoring result in minimal amount of product being affected when critical limits are not met during this period.

[26] Corrective actions should reflect an escalating response when ongoing noncompliance occurs. Corrective actions must take three components into consideration when a critical limit is exceeded. These are: quick restoration of control; disposition of affected product, if applicable; and prevention of recurrence of the problem.

[27] Verification procedures apply to all aspects of the RMP.

[28] Records apply to all aspects of the RMP.

Process step	Hazard ID	CCP no.	Critical limits[29]	Monitoring[30]	Corrective actions[31]	Verification[32]	Records[33]
17. Immersion chilling	B: Enteric pathogens	2	Specified chilling parameters that will achieve specified microbiological targets for carcasses, i.e. - minimum water flow rates (e.g. as per recommendation in PIPS 5) - water temperature - exit temperature of carcass - concentration of bactericidal agent (e.g. chlorine) in overflow water, if used - maximum carcass loading of tanks	Person responsible to check and record chilling parameters at specified frequency[4], i.e. - water flow rates - water temperature - deep muscle temperature of a predetermined number of chilled carcasses - concentration of bactericidal agent in over flow, if used - carcass loading of tanks	Correct chilling parameters. Reduce temperature of products to acceptable level (e.g. blast chill or ice) Increase frequency of monitoring. Review adequacy of operational and/or monitoring procedures.	Product outcome validation Product testing (e.g. microbiological) Water testing Calibration of measuring equipment Internal audit Extrinsic audit (e.g. regulator, client) Client feedback HACCP review	Validation records Daily monitoring records Corrective action reports Analytical test reports Calibration records Internal audit reports Extrinsic audit reports Client feedback records HACCP review records

The operator should also have task instructions to describe how each of the above processing steps are done using good hygienic practices in line with PIPS5.

Other controls for inputs and other sources of hazards are explained in sections 2.7 and 2.8 respectively.

[29] Operators are expected to put in their own limits for each relevant parameter listed below.

[30] Define who, what, when, where and how. Monitoring frequencies should be set so that time periods between monitoring result in minimal amount of product being affected when critical limits are not met during this period.

[31] Corrective actions should reflect an escalating response when ongoing noncompliance occurs. Corrective actions must take three components into consideration when a critical limit is exceeded. These are: quick restoration of control; disposition of affected product, if applicable; and prevention of recurrence of the problem.

[32] Verification procedures apply to all aspects of the RMP.

[33] Records apply to all aspects of the RMP.

Example I1: Identification and control of risks to wholesomeness - Raw whole chicken

Risk to Wholesomeness[34]	Likely cause	Control Measures	Monitoring	Corrective Action	Verification	Records
W: Runts	Inadequate growth.	Cull on arrival – do not hang on kill line.	Record all culls. Must be less than E%.	Notify grower when numbers are abnormal.	Daily check by Hanging Bay Supervisor.	Livestock Log Sheet.
W: Broken bones, excessive bruising	Poor handling during catching, transport and unloading. Incorrect equipment set up.	Staff training. Correct bird numbers in crates. Equipment set up	Carcass assessment, 100 birds checked each run. Must be less than F%.	Notify Catcher and Hanging Bay Supervisors so they can review procedures.	Internal audit	Carcass assessment Sheet.
W: Skin Lesions	Damp litter, livestock diseases, ectoparasites.	Trim affected areas.	Carcass assessment, 100 birds checked each run. Must be less than G%.	Notify grower so procedures can be reviewed.	Internal audit	Carcass assessment Sheet.
W: Red birds	Inadequate bleedout due to incorrect kill procedure or short bleeding time..	Dump.	Carcass assessment, 100 birds checked each run. Must be less than H%.	Notify Kill Room Supervisor so they can check bleeding time and kill efficiency.	Internal audit	Carcass assessment Sheet.
W: Extraneous poultry matter	Incomplete removal of feathers etc. due to poor machinery set up, or bird size variations.	Equipment set up.	Carcass assessment, 100 birds checked each run. Must be less than I%.	Notify Evisceration Supervisors so they can review equipment set up.	Internal audit	Carcass assessment Sheet.
W: Incomplete removal or breakage of viscera	Incomplete removal of feathers etc. due to poor machinery set up, or bird size variations.	Equipment set up.	Carcass assessment, 100 birds checked each run. Must be less than J%.	Notify Evisceration Supervisors so they can review equipment set up.	Internal audit	Carcass assessment Sheet.

[34] Identified by processor's experience.

Example J1: Identification and control of risks from false or misleading labelling - Raw whole chicken

Risk from False or Misleading Labelling	Likely cause	Control Measures	Monitoring	Corrective Action	Verification	Records
L: Incorrect label design	Product development procedures not followed.	Check all label proofs during label design	Sign off by Product Development Manager	Redesign label	Internal audit	Signed label proofs.
L: Product not matching label	Wrong product put in wrong bag.	Check labels on packs at each packing station at start up.	Finished Product Audit. 100% of product to match label.	Replace incorrect packaging at stations. Repack product found to be wrong. Check other recently packed product (back until last correct product audit) and repack if necessary.	Internal audit.	Finished Product Audit Sheet.

2.5 PRODUCT MODULE - EDIBLE OFFAL

Example D2: Product outcomes - Edible Offal

1. Hazards to Human Health:

Hazard[35]	**Aim of RMP**	**Product Outcome**[36]	**Control Measures**	**Response if outcome not met**
B: Enteric pathogens (as for raw chicken)	As for raw chicken	As for raw chicken	As for raw chicken.	As for raw chicken
			Spec 111 of HC Specs[37]	Reclean offal where possible. Review cleaning procedure. 100% reinspection of suspect batches where possible.

2. Hazards to animal health - N/a as product intended for human consumption.

3. Risks to wholesomeness

W: Abnormal offal – colour, visible lesions, tumours, significant abnormalities.	Minimise abnormal offal.	Less than K% defective.	Offal assessment.	Dump affected product.

4. False or misleading labelling

L: As for raw chicken	As for raw chicken	As for raw chicken	As for raw chicken	As for raw chicken

[35] Hazards that are controlled by supporting systems to the extent that they are unlikely to contact product at are not given product outcomes. Refer to Example F2 for more information on these hazards.

[36] Actual targets are to be inserted by the operator wherever a "letter" indicates this, e.g. K%.

[37] HC Specs = Animal Products (Specifications for Products Intended for Human Consumption) Notice 2000.

Example E2: Process flow diagram - Edible Offal

Inputs	Process steps	Edible outputs
Edible offal (from evisceration step)	1. Separation of liver/heart and gizzard Liver /heart Gizzard 2. Peeling of gizzard	
Water with bactericidal agent[38]	3. Washing or immersion chilling	
Plastic pottle, bag or liner, cardboard carton	4. Weighing and packing	
Label	5. Labelling	
	6. Chilling 7. Freezing	
	8. Storage ◄	
	9. Dispatch	Packed chilled/frozen edible offal

[38] The use of a permitted bactericidal agent (e.g. chlorine) varies from premises to premises.

Example F2: Identification of hazards from Inputs - Edible Offal

Raw material component	Biological hazard	Chemical hazard	Physical hazard
Internal organs excluding GIT and including offal	B: Enteric pathogens, e.g. *Salmonella* spp., *Campylobacter jejuni* [39], [40]	C: Chemical residues, e.g. anthelmintics, antibiotics, heavy metals, environmental contaminants	None
Water with permitted bactericidal agent (e.g. chlorine)	None	C: Chemical residues, e.g. from use of unapproved chemicals	None
Ice	B: Microbiological hazards associated with non-potable water, e.g. Enteric pathogens	C: Chemical hazards such as those found in non-potable water, e.g. heavy metals.	None
Transport water	None	None	None
Product contact packaging materials (plastic bag, pottle, or liner)	None	C: Chemicals from plastic.	None
Non-product contact packaging materials (metal clips, cardboard cartons, strapping, tape, labels)	None	None	None

[39] Live birds affected with systemic bacterial infection or septicaemia generally exhibit obvious clinical signs of the disease. Diseased birds are likely to be culled while still on the farm.

[40] Localised pathological abnormalities may occur sporadically in internal organs of chicken. Currently, no national data is available on the pathology of broilers in New Zealand. Anecdotal evidence from industry suggests that pathological abnormalities are rarely observed on internal organs of broilers grown under a whole flock health scheme. An inspection system and disease and defects surveys are currently being developed by NZFSA and industry to gather information on pathology levels on carcasses and offal. If individual premises have a history of lesions etc "reasonably likely to occur" then they should use that info to identify risk factors here.

Example G2: Hazard analysis and and CCP determination for edible offal processing[41]

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[42] at unacceptable levels[43] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard reduce/eliminate the hazard to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
1. Separation of liver, /heart and gizzard (From evisceration step in Example L1)	Edible offal	B: Enteric pathogens		Yes	Faecal contamination from the evisceration steps is likely to result in unacceptable levels of microorganisms.	No	No	
		C: Chemical residues		No[44]				
2. Peeling of gizzard	Edible Offal	B: Enteric pathogens		Yes	Hazards carried over from previous step.	No	No	

[41] Hazard analysis may result in changes to the initial product outcomes set earlier. Confirm outcomes after this analysis.

[42] Product is defined as the edible component of final product.

[43] Unacceptable - as demonstrated by data (scientific literature, applied research or on-site experience) associated with achieving the product outcomes established for the process. In the determination of unacceptability, hazards should be considered in terms of level; frequency; transfer and redistribution; severity of effect on consumer.

[44] Most control measures for addressing potential hazards associated with chemical residues are applied in the livestock production system under a Whole Flock Health Scheme. NZFSA maintains a Broiler Chemical Residue Monitoring Programme that monitors the residue status of birds slaughtered for human consumption. These controls mean that this hazard is only likely to occur at acceptable levels and this is unlikely to change given the nature of the processing involved, so this is not considered further in this HACCP plan, except at the final step to show that it may still be present.

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[42] at unacceptable levels[43] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard reduce/eliminate the hazard to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
3. Washing or immersion chilling	Edible offal	B: Enteric pathogens		Yes	Edible offal are likely to be contaminated with unacceptable levels of microorganisms.	Yes - effective chilling and use of permitted bactericidal agent (e.g. chlorine) can reduce overall microbiological counts[45]		3
			B: Cross-contamination from chiller water	Yes	Immersion chilling can result in an unacceptable increase in the incidence of pathogens. Refer to Annex, Section 5.6.	Yes - effective chilling and use of permitted bactericidal agent (e.g.chlorine) can minimise cross-contamination		3
4. Weighing & packing	Edible Offal			No				
23. Labelling	Label			No				
24. Blast Chilling or Blast Freezing	Edible Offal			No				
25. Chiller or freezer storage	Edible Offal	C: Chemical residues		No[46]				

[45] Washing without the use of a permitted bactericidal agent (e.g. chlorine) may not be an adequate control measure for reducing microbiological levels and minimising cross-contamination to acceptable levels. Premises should take this into consideration during hazard analysis.

[46] Most control measures for addressing potential hazards associated with chemical residues are applied in the livestock production system under a Whole Flock Health Scheme. NZFSA maintains a Broiler Chemical Residue Monitoring Programme that monitors the residue status of birds slaughtered for human consumption. These controls mean that this hazard is only likely to occur at acceptable levels and this is unlikely to change given the nature of the processing involved, so this is not considered further in this HACCP plan.

Example H2: Hazard summary spreadsheet for edible offal

Process step	Hazard	CCP no.	Critical limits[47]	Monitoring[48]	Corrective actions[49]	Verification[50]	Records[51]
3. Immersion chilling	B: Enteric pathogens	3	Specified chilling parameters that will achieve specified microbiological targets for edible offal, i.e. - minimum water flow rates - water temperature - exit temperature of edible offal - time to reach specified temperature from evisceration - concentration of bactericidal agent (e.g. chlorine) in water, if used	Person responsible to check and record chilling parameters at specified frequency , i.e. - check or measure water flow rates - check or measure water temperature - measure temperature of a predetermined number of offal - check time to reach specified temperature - measure concentration of bactericidal agent in water, if used	Correct chilling parameters. Reduce temperature of products to acceptable level (e.g. blast chill or ice) Increase frequency of monitoring. Review adequacy of operational and/or monitoring procedures.	Product outcome validation Product testing (e.g. microbiological) Water testing Calibration of measuring equipment Internal audit Extrinsic audit (e.g. regulator, client) Client feedback HACCP review	Validation records Daily monitoring records Corrective action reports Analytical test reports Calibration records Internal audit reports Extrinsic audit reports Client feedback records HACCP review records

[47] Operators are expected to put in their own limits for each relevant parameter listed below.

[48] Consider who, what, when and how. Monitoring frequencies should be set so that time periods between monitoring result in minimal amount of products being affected when critical limits are not met during this period.

[49] Corrective actions should reflect an escalating response when ongoing noncompliance occurs. Corrective actions must take three components into consideration when a critical limit is exceeded. These are: quick restoration of control, disposition of affected product, and prevention of recurrence of the problem.

[50] Verification procedures apply to all aspects of the HACCP plan.

[51] HACCP records apply to all aspects of the HACCP plan.

Example I2: Identification and control of risks to wholesomeness – Edible offal

Risk to Wholesomeness[52]	Likely cause	Control Measures	Monitoring	Corrective Action	Verification	Records
W: Colour of offal, visible lesions, tumours or other significant abnormalities	Livestock diseases.	Examination at evisceration. Removal of abnormal offal at offal processing step 1.	Person responsible to check a predetermined number of packs at a predetermined frequency for defects and record any problems.	Retrain staff Increase frequency of monitoring Review adequacy of operational and/or monitoring procedures . Notify Livestock Manager so they can review livestock procedures.	Product outcome validation Internal audit Extrinsic audit (e.g. regulator, client) Client feedback HACCP review	Training records. Carcass assessment Sheet.

[52] Identified by processor's experience.

Example J2: Identification and control of risks from false or misleading labelling – Edible offal

Risk from False or Misleading Labelling	Likely cause	Control Measures	Monitoring	Corrective Action	Verification	Records
L: Incorrect label design	Product development procedures not followed.	Check all label proofs during label design	Sign off by Product Development Manager	Redesign label	Internal audit	Signed label proofs.
L: Product not matching label	Wrong product put in wrong bag.	Check labels on packs at each packing station at start up.	Finished Product Audit. 100% of product to match label.	Replace incorrect packaging at stations. Repack product found to be wrong. Check other recently packed product (back until last correct product audit) and repack if necessary.	Internal audit.	Finished Product Audit Sheet.

2.6 PRODUCT MODULE - MATERIAL FOR PET FOOD OR RENDERING

Example D3: Product outcomes – Material for Pet Food or Rendering

1. Hazards to Human Health - N/a - product intended for animal consumption.

2. Hazards to animal health

Hazard[53,54,55]	Aim of RMP	Product Outcome	Control measures	Response if outcome not met
B: Enteric pathogens, e.g. Salmonella spp., Campylobacter jejuni[56], Clostridium spp., Listeria monocytogenes[57]	To minimise presence of enteric pathogens on pet food.	Not yet defined.[58]	HC Specs[59], clause 41: Suppliers of farmed poultry to have a Whole Flock Health Scheme. Good hygienic practices throughout processing. Correct set up of evisceration equipment. Decontamination during processing. Other controls outside scope of RMP: - Feedmilling (inputs, pelleting, use of inhibitors etc.) - Livestock (biosecurity and hygiene).	N/a

[53] Hazards have been coded as follows: B = Biological hazard, C = Chemical hazard, P = Physical hazard.

[54] Hazards that are controlled by supporting systems to the extent that they are unlikely to contact product are not given product outcomes. Refer to Example F3 for more information on these hazards.

[55] National Microbiological Database (NMD) data will provide information on levels achievable for carcasses after slaughter and dressing. Individual premises are expected to assess their own NMD results when setting microbiological targets within the national guidelines, and considering on-farm practices and seasonal factors.

[56] At present, there is insufficient information on *C. jejuni* to establish outcomes for raw poultry. It is unlikely that adequate information will be available in the near future due to uncertainties in current microbiological methodology and controls. Poultry processors should provide those handling raw chicken with information (on labels, in handouts or on web sites) about storage temperatures, cooking temperatures and correct handling to avoid cross contamination from raw poultry to other foods.

[57] Similar to above.

[58] There are no specific outcomes defined for this product, but it is still expected that product will be fit for its intended purpose by controlling using GHP as indicated in control measure column above.

[59] HC Specs = Animal Products (Specifications for Products Intended for Human Consumption) Notice 2000.

Hazard[53,54,55]	Aim of RMP	Product Outcome	Control measures	Response if outcome not met
C - Chemical residues[60]:, e.g. anthelmintics, antibiotics, heavy metals, environmental contaminants	N/a	N/a	N/a	N/a
Physical hazards: None identified.	N/a	N/a	N/a	N/a

3. False or misleading labelling[61]

Risk Factor	Aim of RMP	Product Outcome	Control measures	Response if outcome not met
L: Incorrect label design.	To ensure products are true to label.	All material for pet food or rendering must be labelled as per Industry Standard 7: Byproducts, or otherwise differentiated so that it cannot be mistaken as material that is fit for human consumption. All material for pet food or rendering must meet Regulation 8 of the Animal Products Regulations 2000.	Label design.	Review label design and approval process.
L: Product does not match label.			Check correct label applied at point of application.	Review labelling procedures. Detain material until properly labelled.
L: Product not labelled as NOT FOR HUMAN CONSUMPTION			As above	As above.

4. Risks to wholesomeness: N/a – no customer complaints in last year. No known issues from processing.

[60] These residues usually arise from incorrect use of animal remedies and agricultural compounds, (e.g. pesticides) in the livestock operation. These hazards should be controlled to acceptable levels by the supplier's Whole Flock Health Scheme under Spec 41 of HC Specs[11]. Broiler processors that participate in the National Residue Monitoring Scheme get results that can indicate a need for corrective action by the live bird or feed supplier. Product outcomes for this hazard are not necessary in the RMP as there are no controls within the RMP that impact on the residue level.

[61] Risks of false or misleading labelling have been coded as follows: L = Labelling issue, and the numbers have been allocated sequentially as each different risk factor has been identified.

Example E3: Process flow diagram – Material for Pet Food or Rendering

Inputs	Process steps	Outputs
Offal from evisceration Heads from head puller Feet from transfer machine Edible offal not required Condemned material[62]	1. Offal harvested mechanically or manually	
Water, with bactericidal agent (potable, may be chilled) ➔	2. Transported / cooled by water	
	3. Drained	
Offal truck, or clean containers marked "inedible" ➔	4. Bulk packed	
	5. Chill or Freeze	➔ Material for pet food or rendering

Example F3: Identification of hazards from Inputs - Material for Pet Food or Rendering

Raw material component	Biological hazard[63,64]	Chemical hazard	Physical hazard
Bird inputs as shown in above table.	B[65] - Enteric pathogens, e.g. *Salmonella* spp., *Campylobacter jejuni*, *Clostridium* spp.	C: Chemical residues, e.g. anthelmintics, antibiotics, heavy metals, environmental contaminants	None

[62] If condemned material is used then the product must only go to rendering or to a pet food process where the animal material will be treated in a manner that will minimise the hazards associated with this material.

[63] Live birds affected with systemic bacterial infection or septicaemia generally exhibit obvious clinical signs of the disease. Diseased birds are likely to be culled while still on the farm.

[64] At present, there is insufficient information on *Salmonella*, *C. jejuni* and *L. monocytogenes* on raw poultry to serve as basis for establishing food safety objectives for raw poultry. The implementation of the National Microbiological Database (NMD) programme for broilers is expected to provide information for establishing microbiological targets for *Salmonella*. However, for *C. jejuni* and *L. monocytogenes*, it is unlikely that adequate information will be available in the near future due to uncertainties in microbiological methodology and controls.

[65] Hazards have been coded as follows: B = Biological hazard, C = Chemical hazard, P = Physical hazard, and the numbers have been allocated sequentially as each different risk factor has been identified.

Example G3: Analysis of hazards and other risk factors, and CCP determination for material for pet food or rendering.

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[66] at unacceptable levels[67] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard reduce/eliminate the hazard to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
1. Harvesting	Offal, heads feet, and condemned material	B: Enteric pathogens		Yes	Faecal contamination from the evisceration steps is likely to result in unacceptable levels of pathogens.	No	No	
		C: Chemical residues		No[68]				
2. Transported / cooled by water	Transport water, may not be potable	None		No				
		B: Enteric pathogens		Yes	See step 1.	No	No	
3. Drain		None		No				

[66] Product is defined as the edible component of final product.

[67] Unacceptable - as demonstrated by data (scientific literature, applied research or on-site experience) associated with achieving the product outcomes established for the process. In the determination of unacceptability, hazards should be considered in terms of level; frequency; transfer and redistribution; severity of effect on consumer.

[68] Most control measures for addressing potential hazards associated with chemical residues are applied in the livestock production system under a Whole Flock Health Scheme. NZFSA maintains a Broiler Chemical Residue Monitoring Programme that monitors the residue status of birds slaughtered for human consumption. These controls mean that this hazard is only likely to occur at acceptable levels and this is unlikely to change given the nature of the processing involved, so this is not considered further in this HACCP plan.

Process step	Raw material and Other inputs	Hazards	Process step hazards and potential impact of process step on existing hazards	Q1. Could the hazard be present in or on the product[66] at unacceptable levels[67] at this step? If yes, answer Q2 and Q3.		Q2. Is there a control measure at this step that would prevent unacceptable levels of the hazard reduce/eliminate the hazard to acceptable levels? If yes, step is a CCP. If no, not a CCP.	Q3. Is there a control measure available at a previous step? If yes, retrospectively assign the previous step as a CCP.	CCP No.
				Yes /No	Justification			
4. Pack.	Selected offal	B: Enteric pathogens		Yes	See step 1.	No	No	
	Truck or container	B: Enteric pathogens	B: If container or truck is not clean this could introduce pathogens.	No	GHP in place – including proper cleaning of trucks and containers.			
5. Chill or Freeze	Selected offal	B: Enteric pathogens	B: Minimises or prevents growth	Yes				
		C: Chemical residues		No[69]				

[69] Most control measures for addressing potential hazards associated with chemical residues are applied in the livestock production system under a Whole Flock Health Scheme. NZFSA maintains a Broiler Chemical Residue Monitoring Programme that monitors the residue status of birds slaughtered for human consumption. These controls mean that this hazard is only likely to occur at acceptable levels and this is unlikely to change given the nature of the processing involved, so this is not considered further in this HACCP plan until the last step as it may still be present.

Example H3: Hazard summary spreadsheet for material for pet food or rendering

N/a as there are no CCPs.

Example I3: Identification and control of risks to wholesomeness – Material for Pet Food or Rendering

N/a as there are no risks to wholesomeness.

Example J3: Identification and control of risks from false or misleading labelling – Material for Pet Food or Rendering

Risk from False or Misleading Labelling	Likely cause	Control Measures	Monitoring	Corrective Action	Verification	Records
L: Incorrect label design	Product development procedures not followed.	Check all label proofs during label design	Sign off by Product Development Manager	Redesign label	Internal audit	Signed label proofs.
L: Product not matching label	Wrong product put in wrong bag.	Check labels on packs at each packing station at start up.	Finished Product Audit. 100% of product to match label.	Replace incorrect packaging at stations. Repack product found to be wrong. Check other recently packed product (back until last correct product audit) and repack if necessary.	Internal audit.	Finished Product Audit Sheet.
L: Product not labelled as NOT FOR HUMAN CONSUMPTION	Incorrect label design – see above	As above	As above	As above	As above	As above

2.7 CONTROL OF RISK FACTORS FROM INPUTS

For each input identified in Examples F1-F3 summarise the relevant hazards as shown in the example below, then write up controls for each one in the following sections.

Example K: Summary of hazards from inputs.

Raw material component	**Biological hazard**	**Chemical hazard**	**For controls refer to**
Live Bird	B: Enteric Pathogens	C: Chemical residues	Example L
Permitted bactericidal agent (e.g. chlorine)	None	C: Chemical residues, e.g. from use of unapproved chemicals	Example P
Water	B: Microbiological hazards associated with non-potable water, e.g. Enteric pathogens.	C: Chemical hazards such as those found in non-potable water, e.g. heavy metals	Example M
Ice and steam	B: Microbiological hazards associated with non-potable water, e.g. Enteric pathogens.	C: Chemical hazards such as those found in non-potable water, e.g. heavy metals C: Chemical hazards from unapproved boiler water treatment chemicals	Example N
Product contact packaging materials (plastic bag or liner)	None	C: Chemicals from plastic.	Example O

Example L: Control of Hazards From Live Birds

Hazards
B: Enteric pathogens, e.g. *Salmonella* spp., *Campylobacter jejuni* C: Chemical Residues

Supplier Requirements

Regulatory Requirements:

1. Birds must only be sourced from a broiler supplier that has a whole flock health scheme to ensure that only apparently healthy birds are supplied for processing.[xv] See page 2-40 for footnote.

Operator-defined Requirements:

2. Birds must have been grown in accordance with requirements for any claims re "free range", "barn" or "organic". Certification to recognised systems is optional.

Procedures

The following control measures are the responsibility of the Processing Supervisor:

Step	Control Measure	Monitoring	Corrective Action	Records
1. Order birds	Supplier to give declaration that birds were reared under a Whole Flock Health Scheme.	Check supplier's declarations with each delivery.	Do not process birds without declaration.	Supplier declarations as per HC Specs[xvi]
	Supplier to give declaration that all birds meet requirements for relevant claims, e.g. free range, barn or organic.	Check supplier's declarations with each delivery.	Do not process birds without declaration.	Supplier declarations.

Step	Control Measure	Monitoring	Corrective Action	Records
2. Receive birds	Birds to be apparently healthy on arrival.	Visual inspection on arrival.	Cull any unhealthy birds and condemn carcass. Do not hang on line. Record details on Supplier Declaration. Notify supplier. If necessary consult vet.	Supplier declarations.
3. Process birds	Check birds for livestock related defects after defeathering.	Carcass assessments.	Notify supplier if defects are above defined levels. Remove and rework defective birds or send for secondary processing as appropriate.	Plant processing records.
4. Wash livebird crates and truck	Washing to be done in area where cross contamination of livebirds and processing areas is minimised.			
	All faecal material to be removed using high pressure spray or automatic washer.			
	Rinse			
	Approved sanitiser to be used after cleaning.			

Records

Records have been identified above. They shall be correctly filled out and kept in processing record room.

Operator verification

After each delivery of birds the Processing Manager shall check and sign the supplier declarations. Any problems shall be noted on the relevant record with the details of the corrective action taken. The Manager shall check a defined % of all records to check that appropriate controls are working. Any problems shall be noted on the relevant record with the details of the corrective action taken.

An example of a whole flock health scheme that could be used by the Broiler Grower (so would not be part of the processor's RMP) is shown as Appendix C.

[xv] A whole flock health scheme as referred to on page 2-38 would normally include the following requirements:

Every premises shall maintain a register of suppliers who shall provide records containing evidence of the health status of the broiler flock destined for processing. This should include:

(a) record of any medications or immunisations given to the flock (or individual birds) during the entire growing period;
(b) records of feeding regimes;
(c) records from visits by company or independent veterinarian or competent person;
(d) records of blood tests or the results of other individual or flock diagnostic results that would establish and verify the health status of the individual/flock;
(e) records from *Salmonella* testing of the flock, and any other microbiological results performed on the flock;
(f) any other records that would help establish and verify the health status of the flock.

Evidence of the disease status of birds shall be either:

(a) in the form of records of an effective whole flock health scheme under the supervision of a competent person; **or**
(b) evidence provided by a competent person from inspections carried out at the farm of supply.

If the inspections suggest that broilers display symptoms of a notifiable or exotic disease, the operator should contact the Ministry of Agriculture and Forestry's Outbreak Response Services (0800-809-966) as soon as possible.

Competencies for the competent person person performing the inspection could include:

(a) the ability to recognise the specific diseases and conditions affecting broilers, and the ability to take appropriate action;
(b) the use, dosages, broad effects, and withholding periods for the animal remedies licensed for use with poultry, and the ability to administer the license animal remedies as required clarification: under the supervision of the veterinarian or as stipulated on the licensed animal remedy's label;
(c) the development, maintenance, implementation and monitoring of quality systems for the farm; and
(d) the importance of monitoring the production shed for microbial contaminants.

Apparently unhealthy birds shall not be sent for processing. Moribund or unhealthy birds shall be culled.

The welfare of birds shall be in accordance with the *'AWAC Code of Recommendations and Minimum Standards for the Welfare of Animals Transported in New Zealand*' (AWAC Code 18) [November 1999], especially Section 14 (and any subsequent amendments) which gives the minimum guidelines for the transportation and handling of animals.

[xvi] HC Specs = Animal Products (Specifications for Products Intended For Human Consumption) Notice 2002.

Example M: Control of Hazards From Water

Hazards	
B: Microbiological hazards associated with non-potable water, e.g. *Salmonella* spp.	C: chemical hazards such as those found in non-potable water, e.g. heavy metals.

Requirements

The Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 gives the following definition.

potable water means water that —

(a) in relation to water supplied by an independent supplier (including a public or private supplier), is of a standard administered by the independent supplier under the Health Act 1956 and any regulations made under that Act; or

(b) in relation to water supplied by the operator solely for the use of the operator (such as bore water, rainwater, surface water, or ground water), —

(i) is of a standard equivalent to that referred to in paragraph (a), as determined by the operator based on an analysis of hazards and other risk factors; or

(ii) complies with the requirements in Schedule 1; or

(c) meets the requirements of the current "Meat Division Circulars 86/3/2 Surveillance of Potable Water in Meat and Game Export Premises" and "86/3/5 Amendment to MDC 86/3/2 86/14/5 on Surveillance of Potable Water in Meat and Game Export Premises" issued by the Ministry.

The Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 gives requirements as summarised below. (Refer to NZFSA web site for full details).

8. Water coming into contact with animal material or animal product

Water (including ice and steam) that comes into direct or indirect contact with animal material or product must be potable, at the point of use. This does not apply to water used for live animals.

9. Water not coming into contact with animal material or animal product

Water that does not come into direct contact or indirect contact with animal material or animal product must be potable, or the appropriate standard must be determined by the operator —

(a) by an analysis of hazards and other risk factors; and

(b) taking into consideration the intended use of the water.

11. Requirement for reticulation management plan

The operator must implement a reticulation management plan for potable water used within a premises or place. This plan must include —

(a) systems to ensure that the water is not adversely affected by the reticulation system so that the intended water quality is delivered at point of use; and

(b) systems to ensure that there is no unintentional mixing of water of different standards; and

(c) an action plan with appropriate sanitation procedures to be implemented in the event of non-compliance with the reticulation management plan.

12. Requirement for water management plan

The operator must implement a water management plan for water described in clause 8 if —

(a) water is subjected to any treatment by the operator; or

(b) water is supplied by the operator solely for the operator's use.

The water management plan must include —

(a) any additional treatments; and

(b) (b) the water quality standard (including criteria) as determined through an analysis of hazards and other risk factors; and

(c) a water sampling and testing programme; and

(d) an action plan in the event of non-compliance with the water management plan; and

(e) the requirements of the reticulation management plan described in clause 11(2).

13. Water analyses

Water analyses must be performed by a MILAB laboratory registered for the required analyses, or a laboratory with persons who are accredited as signatories for the required analyses. The operator must ensure that the training of water samplers is undertaken by that laboratory. (This does not apply to chlorine, pH or turbidity measurements, which are performed by a suitably skilled person using documented test methodologies and/or calibrated equipment).

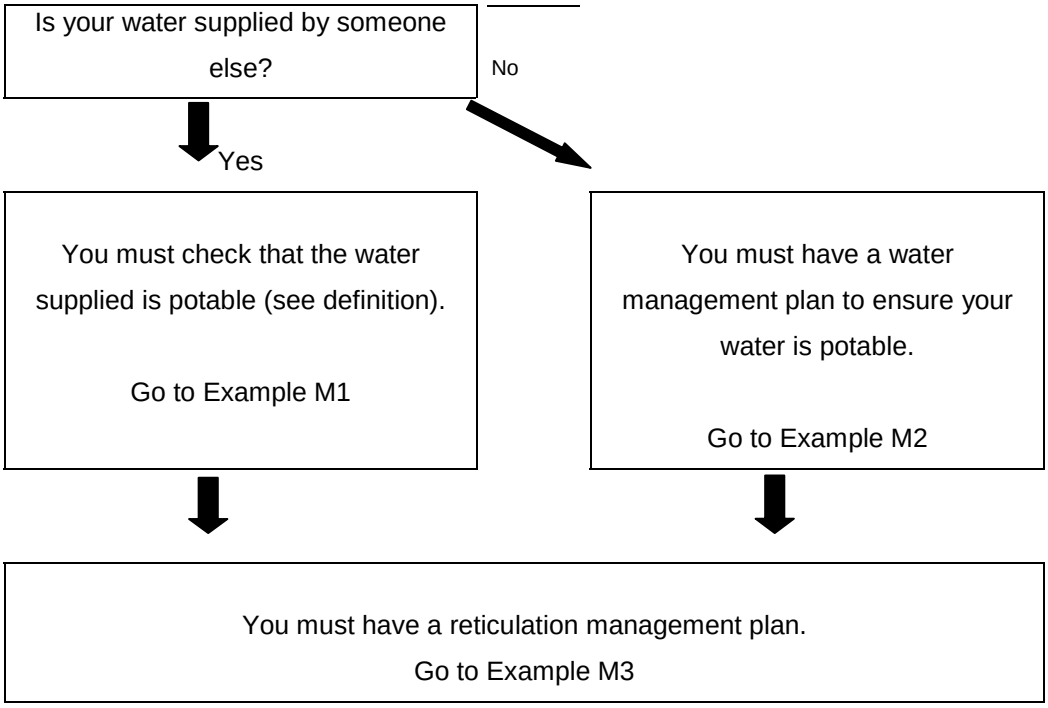
14. Non-complying water

If an independent supplier advises the operator that their water is not fit for drinking without additional treatment, or the operator has reason to believe that the water is not fit for use, and the operator has no other means described in the RMP to ensure the water is potable at the point of use, all operations involving that water must cease.

If water used is supplied by the operator, and the operator fails to comply with any of the requirements of the water management plan (including corrective actions), and has no other means described in the RMP to ensure the water meets the original standard at the point of use, all operations involving that water must cease.

Procedures[70]

The way that you need to control water safety depends on whether you have your own supply or if you get water off someone else (e.g. the local Council).



If you have a combination of supplies use the appropriate section for each one.

[70] The following procedures are based on using option a) or option b) ii of the options given in the definition of potable water on the first page of this section (the former for water supplied by an independent supplier and the latter for water supplied by the Operator).

Example M1: Identification and Control of Risk Factors From Inputs – Water – Supplied by Someone Else

Note: The Animal Products specifications for potable water assume that if an independent supplier meets the Health Act 1956 and its associated regulations then the water will be fit for its intended purpose and no further identification and analysis of hazards and other risk factors is necessary.

Who supplies your water?	Fill in the name(s) of the supplier. For "town supply" put in local council's name.
Do they comply with the Health Act 1956 and any regulations made under that Act?	If yes – get the supplier to send you a letter stating that they meet these requirements and will notify you when they don't. Add them onto your approved supplier list. If no – find an alternative supplier or ask them to meet the requirements.
If they advise you that the water is not fit for drinking without additional treatment, or if you believe that this is the case, what will you do?	Get water from an alternative supplier, or treat the water to fix the problem after consultation with appropriate experts, or cease production.

Go to example M3.

Example M2: Identification and Control of Risk Factors From Inputs – Water – Own Supply

Potable water supplied by the operator solely for the use of the operator (such as bore water, rainwater, surface water, or ground water) must comply with the requirements in **Schedule 1** of the Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002. After filling out the checklist follow these instructions:

- If your water is secure go straight to example M3. (Secure means all of Part 3 was OK).
- If not, fill out your water management plan. (See next page).

Water Management Plan:

Why was your water unsatisfactory? (Get this from your earlier answers)[71]	
Is there a biological, chemical or physical hazard associated with this problem? If so what? (See next table for ideas).	

	Hazards	Examples
Biological hazards	Harmful bacteria from the gut of humans, animals and birds.	*Salmonella* species
	Parasites	*Giardia* *Cryptosporidium*
Chemical hazards	Chemical residues	Pesticides, herbicides, fumigants
	Heavy Metals	Mercury, cadmium, copper, lead, zinc, selenium, arsenic, chromium. manganese, antimony
Physical hazards	N/a	N/a

What will you do to correct or control this problem/hazard? Consider removing the problem the problem where possible or treatment e.g. chlorination, filtration.[72]	

[71] If no problems were identified with your water source put n/a and go to next page and answer the questions on testing.

[72] You may need to ask for expert advice on this.

Water Testing plan:

		Test frequency			
		Secure water	Unsecure Water[73]		
Measurement	**Criteria**		**<2000 m^3/day**	**2000-10,000 m^3/day**	**>10,000 m^3/day**
faecal coliforms	Must not be detectable in any 100 ml sample	Nil	1 test every month	1 test every 2 weeks	1 test every week
Chlorine (when chlorinated)	Not less than 0.2mg/l (ppm) free available chlorine with a minimum of 20 minutes contact time	Nil	1 test every month	1 test every 2 weeks	1 test every week
pH (when chlorinated)	6.5 to 8	Nil	1 test per month	1 test per 2 weeks	1 test per week
Turbidity[74]	Should not routinely exceed 1 NTU, must not exceed 5 NTU	Nil	daily	daily	daily

What will you do if any of these criteria are not met? Consider extra treatment, further testing, alternative supply etc. You may need to ask an expert for help.	
What lab does the micro tests?	
Are they MILAB accredited[75]? If so ask for letter confirming this. If not, find another lab which is.	

[73] Average daily use (while processing). Unsecure water includes surface water and roof water

[74] The frequency of turbidity testing will depend on the degree of protection of the water source and whether the operator elects to filter the water. Alternative frequencies may be used where validated in the RMP

[75] MILAB is a laboratory accreditation programme run by NZFSA. See NZFSA web site: www.nzfsa.govt.nz/animalproducts/milab/index.htm or contact Assistant Director, Monitoring and Review for details (04, 463 2500).

Who are the water samplers and were they trained by the lab to take samples properly?	
Who does the pH, chlorine and turbidity tests? Have they been trained?	pH: Chlorine: Turbidity:
What equipment/ test kit/ method is used for these tests? How is any equipment calibrated to make sure it is accurate (Refer to the manufacturer's instructions or supplier for details).	pH: Chlorine: Turbidity:
What test records do you have: for pH, chlorine and turbidity tests?	Micro: Lab report pH: See Water Test Record Chlorine: See Water Test Record Turbidity: See Water Test Record

Note: If water is supplied by the operator, and the operator fails to comply with any of the requirements of the water management plan (shown on last 3 pages), and has no other means described in the RMP to ensure the water meets the original standard at the point of use, all operations involving that water must cease.

Also go to Example M3.

Example M3: Identification and Control of Risk Factors From Inputs – Water – Reticulation Management

Note: The following questions have been asked to ensure that the quality of the water coming in is maintained. Further identification and analysis of hazards and other risk factors is not required.

Do you have a plan of the water pipes on your premises?	If yes – go to next question. If no – get a plan off your council (if possible) then go to next question.
Do you have more than one standard of water on your premises, e.g. potable water, and non-potable water – perhaps for fire fighting?	If yes – show the different water types clearly on your plan. Check that there are no cross-linkages between the potable water pipes and non-potable water pipes, or if there is, that there are non-return valves to prevent non-potable water getting into potable pipes. If there are problems get them fixed and update the plan. If no – go to next question.
Do you have dead ends in your potable water pipes where water can stagnate?	If yes – remove them and update the plan. If no – go to next question.
Are your pipes in good condition, i.e. not rusting, not damaged?	If yes - go to next question. If no – fix them, then go to next question.
If any of the above change what will you do?	Update worksheet. Fix any problems. Flush pipes to remove contamination. Dispose of any suspect product or get it tested to ensure that it is still fit for intended use.

Note: If you have difficulty doing this at least document:

- where water enters your property and where the taps are;
- any previous problems with water;
- any observed changes in water, e.g. increased sediment, colour changes;
- any known alterations to pipes;
- any water test results.

You may need to consult your plumber or a water expert for help.

Example N: Control of Hazards From Ice or Steam

Hazards	
B: Microbiological hazards associated with non-potable water, e.g. *Salmonella* spp.	C: chemical hazards such as those found in non-potable water, e.g. heavy metals. C: chemical hazards from use of incorrect boiler treatment chemicals

Supplier Requirements

Regulatory Requirements:

8. Water coming into contact with animal material or animal product

Water (including ice and steam) that comes into direct contact or indirect contact with animal material or animal product must be potable at the point of use.

Procedures - Ice[76]

The following control measures are the responsibility of the Processing Supervisor:

Step	Control Measure	Monitoring	Corrective Action	Records
1. Order ice	Supplier to give declaration that ice made from potable water.	Check supplier's declarations with each delivery.	Do not use ice without declaration.	Supplier declarations.
2. Receive ice	Visual inspection on arrival for intact and clean packaging.	N/a	Reject ice if packaging dirty or broken.	Delivery docket.
3. Store ice	Store in manner that minimises contamination.	N/a	N/a	Plant processing records.
4. Use ice	Record batch details if any.	N/a	N/a	Plant processing records.

[76] This has been written assuming that all ice is bought in from an external supplier. If ice is made on site then the operator would have to have additional procedures covering ice making, including use of food grade salt, use of potable water, control of ice machine etc.

Procedures - Steam

Steam is made on site and is used in the scalders. Only potable water is used. This is covered in previous section. The use of appropriate boiler treatment chemicals is covered under the Chemical System in Example P.

Records

Records identified above shall be correctly filled out and kept in processing record room.

Operator verification

After each delivery of ice the Processing Manager shall check and sign the supplier declarations. Any problems shall be noted on the relevant record with the details of the corrective action taken.

Example O: Control of Hazards and Risks to Wholesomeness From Packaging

Scope

Whole bird bags, Cartons.

Hazard
C: Transfer of chemicals from plastic to product.

Regulatory Requirements
1. Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 30: The composition and, the conditions of use of packaging must — (a) comply with the requirements specified in the current US Code of Federal Regulations, Title 21, Parts 170–199 (21 CFR 170–199), which applies equally to coatings and linings of containers and cartons where these are the direct product contact surface; or (b) comply with the requirements specified in the current "Australian Standard for Plastics Materials for Food Contact Use, Australian Standard AS2070–1999"; or (c) be determined by the operator to be suitable for use, based on an analysis of hazards and other risk factors from the packaging.
2. If compliance with the above requirement is achieved through meeting subclause (1)(a) or (b), the risk management programme must state the full reference to the regulation, part, section or standard with which the packaging complies.

Supplier Requirements
3. No claims shall be printed on product contact packaging unless this has been specifically ordered.
4. Wording on any claims must be as specified in the order.
5. Product contact packaging shall not be recycled.

Procedures

The following control measures are the responsibility of the Processing Supervisor:

Step	Control Measure	Monitoring	Corrective Action	Records
1. Order packaging	All printing on packaging to be specified in the order.	Check proof or example prior to placing order.	Do not use packaging with false claims. Return to supplier.	Purchase order
	All packaging to conform to requirement 1 above.	Check prior to order.	Do not use packaging which does not meet requirement. Return to supplier.	Purchase order
2. Receive packaging	Confirm that any claims match order.	Visual inspection on arrival.	Do not use packaging with false claims. Return to supplier.	Inwards goods docket.
3. Storage	Store in clean, dry area. Protect from contamination.	N/a	Correct problem. Retrain staff.	
4. Use packaging	Confirm that any claims match product.	Visual inspection before use.	Do not use incorrect packaging.	

Records

Records are identified above. Records shall be kept in the Processing Records Room.

Operator verification

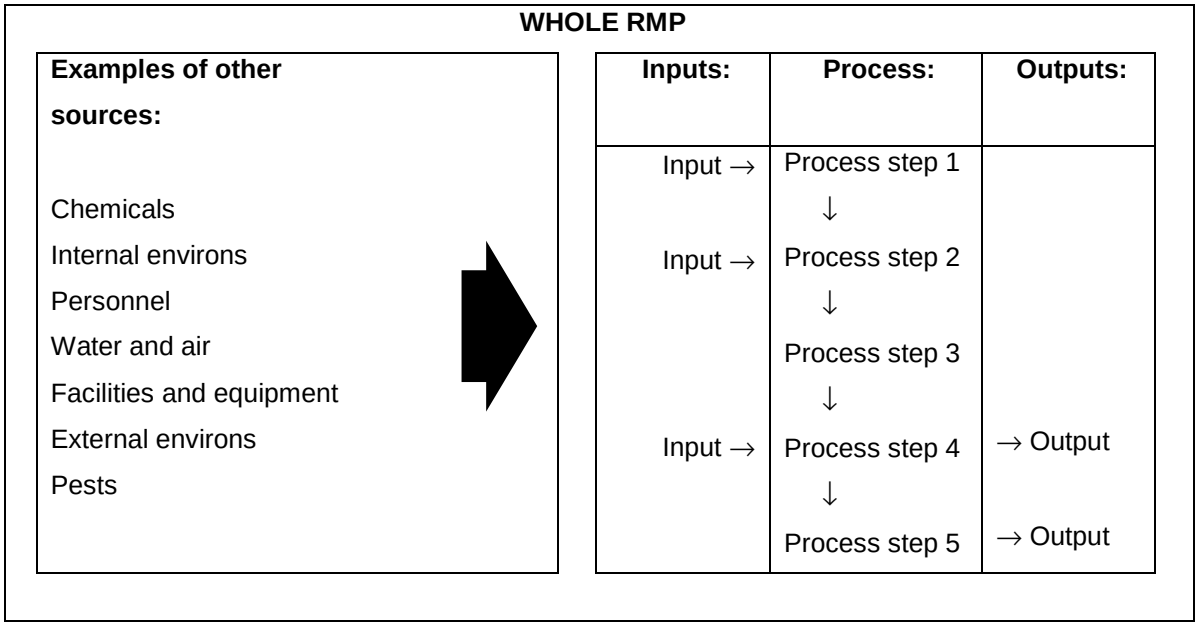
After each delivery of packaging the Processing Manager shall check a defined % of all records to check that appropriate controls are working. Any problems shall be noted on the relevant record with the details of the corrective action taken.

2.8 CONTROL OF RISK FACTORS FROM OTHER SOURCES

As shown in the diagram, there are three main sources of hazards to consider for any operation:

- raw materials and other inputs to a process (refer to 2.7);
- process steps themselves (refer to examples G1 to G3), and
- "other sources" that may interact at a number of process steps within and across various processes.

Sources of hazards within an RMP



Examples of the **"other sources"** of hazards are shown below. Some of these sources will overlap, e.g. pests and external environs.

"Other Source"	**Refer to**[77]
Chemicals	Example P
Internal environs, Facilities and equipment	Example Q
Personnel	Example R
Air	Example S
External environs	Example T
Pests	Example U

[77] If an operator already has supporting systems written up that adequately cover these sources then these may be used instead of the sections referred to here. It is recommended that the operator add in which hazards are being controlled by which controls within these systems.

Example P: Analysis / Control of Hazards and Other Risk Factors From Other Sources - Chemicals

Scope

Chemicals used for processing, cleaning, sanitation, fumigation, pest control, boiler water treatment and lubricants.

Requirements

Regulatory Requirements
1. Cleaning and fumigation chemicals to be labelled with the name or names of the approved maintenance compound as they appear in the list of approved maintenance compounds contained in NZFSA Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002.
17 Additives, processing aids, vitamins, minerals, and other nutrients The identity and purity of additives, processing aids, vitamins, minerals, and other added nutrients must comply with the current Australia New Zealand Food Standards Code, Part 1.3 "Substances added to Food", Standard 1.3.4 "Identity and Purity".

Operator-defined Requirements
2. The access, handling and use of chemical compounds shall be supervised by trained personnel.
3. Chemical compounds shall only be used according to the directions of the manufacturer and subject to the conditions of the authorisation.

Process flow diagram

Inputs	**Process steps**	**Outputs**
Chemicals	1. Order chemicals 2. Receipt of chemicals 3. Storage 4. Use chemicals 5. Unused chemicals returned to storage 6. Disposal of empty containers	➔ Empty containers

Identify / Analyse Hazards and Other Risk Factors, and Determine CCPs[78]

Hazard or Risk Factor	Current Control measures, e.g. GHP / GMP CCPs	Is there a relevant measurable specification	**Q1:** Is hazard reasonably likely to contact product? If yes, go to Q2. If no, not a CCP. Go to next hazard or risk factor.	**Q2:** Could the level of hazard exceed the measurable requirement? If yes, go to Q3. If no, not a CCP. Go to next hazard or risk factor.	**Q3:** Is there one or more new or improved controls that will achieve the measurable requirement? If no, go to Q4. If yes set up CCP to meet measurable specifications and also go to Q4.	**Q4:** Are there any other controls? If yes, redesign / establish GMP/GHP to meet remaining specifications. If no, and no CCPs list as uncontrolled. Consider at process analysis.
C: Residues from chemicals used in cleaning, fumigation etc	None	Yes – Appropriate use of approved chemicals	Yes	Yes	Yes **CCP 4**: Order chemicals. **CCP 5**: Use Chemicals	No.

Critical limit determination

Determine critical limits for each CCP (see table below).

CCP No.	CCP	Critical Limits
4	Order chemicals	All ordered chemicals are approved for their intended use as per NZFSA Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 .
5	Use chemicals	Use correct approved chemical for intended use, in accordance with manufacturer's instructions.

Procedures

The following control measures are the responsibility of the Processing Supervisor:

[78] If the operator had good control measures already in place, (e.g. Only purchasing approved chemicals, and using them in accordance with manufacturer's instructions) then the answers to the questions would be different and a CCP would not be identified.

Step	CCP or General Control	Critical Limit or General Criteria	Monitoring	Corrective Action	Records
1. Order chemicals	CCP 4	All chemicals are approved for intended use as per Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002.	Check supplier's evidence of chemical approval.	Do not use unapproved chemicals. Return to supplier.	Approved supplier list.
2. Receive chemicals	GC	Confirm that chemical clearly labelled and matches that ordered.	Visual inspection on arrival.	Do not use unapproved chemicals. Return to supplier.	Inwards goods docket.
3. Storage	GC	Store in accordance with Manufacturer's instructions.	N/a	Correct problem. Retrain staff.	Chemical Use Record.
4. Use chemicals	CCP 5	Use correct approved chemical for intended use, in accordance with manufacturer's instructions.	Record all chemicals used, date, what it was used for, quantity used and any dilutions.	Get expert advice if necessary.	Chemical Use Record.
5. Unused chemical returned to storage					
6. Disposal of empty containers	GC	Dispose in accordance with manufacturer's instructions. Do not reuse containers for other things.	N/a	Correct problem. Retrain staff.	Chemical Use Record.

Records

Records are identified above. Records shall be kept in the Processing Records Room.

Operator verification

Once a month the Processing Manager shall check and sign the inwards goods dockets for chemicals received that month and the Chemical Use Record. Any problems shall be noted on the relevant record with the details of the corrective action taken.

Example Q: Analysis / Control of Hazards and Other Risk Factors From Other Sources - Internal environs

Scope

Includes the design, construction, maintenance, housekeeping and cleaning of the processing facility and associated buildings, equipment:

Requirements

Regulatory Requirements
Animal Product Regulations, 2000: 10. Requirements for premises, places, facilities, equipment, and essential services—All specified persons must ensure that these are-- (a) designed, constructed, and located to enable suitability of the animal material to be maintained, and the fitness for intended purpose of the animal product to be achieved and maintained, (b) operated to minimise and manage the exposure of animal material or animal product or associated things to risk factors.
Animal Product Regulations, 2000: 11 Hygiene Of Processing Environment— All specified persons must establish and carry out effective procedures to-- (a) ensure appropriate and adequate maintenance, cleaning, and sanitation of processing premises, places, facilities, essential services, and equipment (including conveyances); and (b) manage waste; and (c) control pests.
Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 5: Design and construction. (1) Any material or exposed internal surface finish used in the building, manufacture, or maintenance of facilities, equipment, or internal structures, must — (a) be impervious, non-absorbent, and free from depressions, pits, cracks, and crevices that may harbour contaminants; and (b) be easily cleaned and sanitised; and (c) be unaffected by any corrosive substance with which it is likely to come into contact; and (d) be durable, resistant to fracture, and capable of withstanding repeated exposure to normal cleaning and sanitising; and (e) in the case of surfaces (other than those used for walking or standing on during operations), be smooth and minimise the accumulation of condensation; and (f) in the case of materials lining the walls, floors, and ceilings, be of a colour that does not disguise contaminants having regard to the lighting arrangements. The facilities, equipment, and internal structures, must be of sanitary design.

Regulatory Requirements
Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 6: Facilities and equipment etc (1) Appropriate animal holding facilities must be provided where animals are held prior to slaughter and must be operated within their design capability and capacity. (2) Appropriate facilities for checks, including ante-mortem and post-mortem examination of mammals and birds, must be provided where appropriate, and must be operated within their design capability and capacity. (3) Temperature controlled rooms and equipment must be operated within their design capability and capacity, and must consistently deliver temperatures as specified in the RMP. (4) Cleaning and sanitation facilities, and equipment, must be provided to ensure that the hygiene of personnel, equipment and the premises or place can be maintained.
Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 7. Lighting - Lighting must be of a sufficient intensity and quality to enable satisfactory performance of all operations.
Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 19: Management of animal material or animal product not for human consumption Equipment or storage areas used to store or contain animal material that is not suitable for processing or animal product that is not fit for human consumption, but is suitable or fit for some other purpose, must — (a) be clearly identified; and (b) not be a source of contamination to other animal material or animal product that is intended for human consumption. Animal material or animal product that is not suitable for processing or not fit for human consumption but is suitable or fit for some other purpose, must be kept under controlled conditions until adequately identified in a manner that will ensure that it will not be mistakenly or fraudulently released as suitable for processing or fit for human consumption.
Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 21: All containers of approved maintenance compounds must be labelled with the name or names of the maintenance compound as so approved, or as they appear in the list of approved maintenance compounds contained in NZFSA's Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 (Refer to http://www.nzfsa.govt.nz/animalproducts/legislation/notices/m15-chem-schedule-all.pdf). Directions and conditions for use must be followed.

Regulatory Requirements
Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 20: Waste management (1) For the purposes of this clause **waste** includes animal material and animal product which has been assessed by an examiner who meets the competency requirements of clause 25(1)(a), or an animal product officer, and has been adjudged unsuitable or unfit for any purpose, and is awaiting disposal. (2) Equipment, and storage areas, used to store or contain waste must — (a) be clearly identified; and (b) not be a source of contamination to other animal material or animal product. (3) Waste must be kept under controlled conditions until adequately identified in a manner that will ensure that it will not be mistakenly or fraudulently released as suitable for processing or fit for human consumption. (4) Waste must be disposed of by a method that ensures that it will not become a source of contamination to other animal material or animal product.

Operator-defined Requirements
Visual assessment of the internal environment (walls, ceilings, floors, drains, entrances etc.) shall verify the effectiveness of the cleaning programme.
All cleaning chemicals and maintenance compounds to be approved and to be used as per Approvals Manual /manufacturers requirements.
Maintenance activities and actions taken to correct sanitary defects shall be carried out so that contamination is minimal
The premises shall meet the requirements of IS2 except as described in Technical Directive 02/055 - Poultry - Amendments to Industry Standard 2 (Construction and Design)
Dropped meat[79] shall be dumped or reprocessed by washing in cold potable water in a dedicated washing area.

Process flow diagram:

For chemicals refer to Example P.

[79] Current industry practices of washing dropped meat in a chlorine bucket are undesirable. Operators should move towards having dedicated washing facilities with flowing potable water to reduce contamination to acceptable levels. If an operator wishes to continue to use chlorine buckets, then detailed procedures will be needed (especially for maintenance of the defined chlorine level), and the effectiveness of this practice in removing bacterial contamination will need to be validated.

Identify and Analyse Hazards

Sources of hazards	Hazards reasonably likely to occur	Current Control measures	Any measurable requirement?
Chemicals	C: Residues from cleaning, fumigation, maintenance and pest control chemicals	Only purchase approved chemicals. Comply with conditions of approval and manufacturer's instructions for use.	Yes = See Example P
Buildings	B: Enteric pathogens e.g. *Salmonella* spp., *Campylobacter jejuni* B: Environmental pathogens, e.g. *Listeria monocytogenes*	Sanitary design. Cleaning and sanitation of all buildings after processing or at appropriate intervals for non-processing areas.	
Processing equipment	B: Enteric pathogens e.g. *Salmonella* spp., *Campylobacter jejuni* B: Environmental pathogens, e.g. *Listeria monocytogenes*	Sanitary design. Cleaning and sanitation of all equipment after processing. Pre start checks. Refrigeration management to minimise growth of pathogens.	No
Tools	B: Enteric pathogens e.g. *Salmonella* spp., *Campylobacter jejuni* B: Environmental pathogens, e.g. *Listeria monocytogenes*	Cleaning and sanitation of all tools prior to bringing into processing.	No
Waste	B: Enteric pathogens e.g. *Salmonella* spp., *Campylobacter jejuni* B: Environmental pathogens, e.g. *Listeria monocytogenes*	Regular removal and containment of waste.	No
Dropped meat	B: Enteric pathogens e.g. *Salmonella* spp., *Campylobacter jejuni* B: Environmental pathogens, e.g. *Listeria monocytogenes*	Dump or wash.	No

CCP and critical limit determination

There are no CCPs for the non-measurable requirements. The only measurable requirements relate to chemical hazards that have already been addressed. See Example P.

General criteria - cleaning

1 There is a site plan showing the location of raw processing areas, cooked processing areas, canteen, laundry, other support areas, staff amenities and toilets.
2 There are Cleaning Schedules for all areas and items of equipment. These are reviewed monthly and when changes occur (such as the addition of new equipment).
3 Validate the frequency of cleaning by taking APC swabs of product contact surfaces in each department during the working day: Before production 3 times (at breaks) during the day Within the last hour of production. All samples to be 5cm^2 and a minimum of 5 product contact surfaces to be swabbed per department and the trial conducted for at least 3 days. Compare results with APC levels on incoming product on that day, minimum 20 samples per day.
4 All chemicals must be approved (Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002) and must be used according to the manufacturer's instructions (especially for concentration of detergents and sanitisers). Potable water shall be used for the mixing of detergents, sanitisers and the intermediate and final rinses.
5 Wet cleaning method: Before wet cleaning commences all product, packaging and waste materials shall be removed from the room. If water sensitive items cannot be removed they should be cleaned and suitably shrouded or covered. Product contact surfaces shall be: • Rinsed to remove loose debris and soil. • Washed with a detergent applied in the form of a foam, gel or manually with a brush (pads or cloths will not be used unless single use or washed and soaked in sanitiser following use). • Physical removal of heavy soil may be necessary. • Rinsed • Sanitised • Rinsed (unless C42 sanitiser used at correct concentration).

6 Cleaning equipment: This shall be made from non-porous material that is easily cleanable and not a foreign body risk (eg no wooden handles, bristle fillings or woven cloths), scrubbing pads (eg green Scotchbrite) shall be single use only or cleaned and left in sanitiser solution until next use. This shall be cleaned after every use, stored away from the immediate production area off the floor and in an area designed to minimise contamination. Any equipment used for collecting glass/metal following breakage shall either be disposed of or used for this purpose only (and suitably identified and stored).
7 Order of cleaning: It is good practice to clean the cleanest areas first then move onto heavily soiled areas such as the hanging bay. Also use dedicated equipment for cleaning of these heavily soiled areas. If this is not possible the equipment must be thoroughly cleaned and sanitised before use on product contact equipment and cleaning staff moving between these areas must change protective clothing.
8 Cleaning and sanitising of catching equipment: Live bird crates, modules and truck decks must be rinsed free of faeces and other debris, then sanitised.
9 Hanging Bay clean: Remove all debris and hose off equipment at the end of the day. Weekly full clean and sanitise
10 Raw product processing areas to be cleaned and sanitised: All process scraps to be removed from product contact surfaces at break times. Equipment, floors and walls with visible soiling to be cleaned & sanitised daily. Walls with no visible soiling to be cleaned & sanitised at least weekly. Ceilings & overheads to be cleaned & sanitised at least monthly.
11 Knives, mesh gloves and non-disposable gloves to be cleaned and sanitised, if in contact with product, at each break: Remove soiling and leave in sanitiser over break or dip in water > 82C before use. Or wash gloves whilst on hand and sanitise with hand sanitiser. Rinse in potable water before use if chemical sanitiser used. Other product contact clothing such as aprons must be cleaned or replaced at each break.
12 Equipment return to use following maintenance or repair: Check that any contaminated product is appropriately disposed of following repairs to equipment. Product contact equipment must be free of foreign bodies, spare parts etc. Equipment must be cleaned and sanitised before return to use. Routine maintenance to be scheduled prior to daily clean. Where this is not possible (e.g weekend maintenance) ensure machine is cleaned and sanitised prior to use.
13 Cleaning and storage of other equipment used during processing: Dixies, other product contact containers and aluminium or plastic pallets shall be cleaned and sanitised. Clean dixies, containers and pallets shall be stored in an enclosed vermin proof area. Offal and rubbish bins used within the hygienic envelope shall be cleaned and sanitised.
14 Canteens and ready to eat product preparation areas: All product contact surfaces and equipment must be cleaned and sanitised after use

15 Support areas to be cleaned:

Floors, toilets, laundry and canteen areas to be cleaned and sanitised daily.

Packaging and dry ingredients stores to have spillages removed as soon as practicable and floors swept weekly.

Walls, ceilings and overheads to be cleaned monthly.

General Criteria – Sanitary Design

1 In the construction of the premises the design shall consider the following elements:

- Working space
- Access for cleaning
- Environmental hazards/contamination
- Cross contamination
- Process flows
- Personnel flows

2 Design of equipment:

Equipment shall be designed so that it is easy to clean with minimum dismantling / assembly required.

Equipment shall conform to IS2 and where appropriate one of the following standards: CFR-21 or NSF-3.

3 Protection during change:

Where changes are made to premises or equipment the existing facilities shall be protected from the external environment and from any items brought into the internal environment to minimise contamination during the change. Where it is reasonably likely that hazards could be introduced during this period a control programme shall be documented to manage these hazards during the relevant period. This may involve extra monitoring, corrective action and verification activities.

4 Amendments:

Where changes are significant the RMP must be amended and the amendment registered before the change is made. If the change is minor the RMP shall be updated to reflect the changes made.

General Criteria – Refrigeration Management

The programme shall demonstrate the temperature control of the product through minimising temperature rises during processing (e.g. by maintenance of room temperatures, and/or use of ice), and specific temperature limits for product as it exits any cooling steps, e.g.:

- Immersion spin chiller,
- blast chiller(s), chiller(s),
- blast freezer(s), freezer(s).

The programme shall specify how each control operates and state the defined time and/or temperature parameter(s).

General Criteria – Repairs and maintenance

1 A preventative maintenance scheduling system is in place and ensures that all plant equipment and machinery are periodically inspected and serviced during non-production hours to prevent breakdowns during production as much as possible. This scheduling also includes the periodic inspection of the grounds and buildings as follows:

Internal Areas:	External Areas
• Floors • Walls • Ceilings • Windows • Doors • Walkways, stairs etc • Lighting • Fixtures and fittings	• Exterior of building • Drainage • Yard/ Perimeter of premises • External doors • Pest proofing

2 When there is a breakdown during processing, which means intrusive maintenance cannot be carried out in a sanitary manner, one of the following controls will be implemented:

- All product, by-product or packaging shall be removed from the area and the equipment being repaired.
- Processing shall cease in the affected area. Product, by-products or packaging shall be protected from contamination during the repair of the equipment.
- The defective equipment shall be removed from the processing environment to be repaired whilst production continues, provided its removal does not jeopardise product safety or quality.

3 Maintenance personnel shall comply with the requirements for the personal hygiene appropriate to the area they are working in. This includes having protective clothing in appropriate hygienic condition.

4 Tools, parts and chemicals used for intrusive maintenance shall wherever possible be dedicated for this task and cleaned and sanitised before use in processing areas. They shall not come in contact with product or by-products, or compromise the hygienic status of any product or packaging material.

5 After major maintenance has been carried out, the Team Leader for that area shall ensure and sign off that the machinery and equipment have been properly cleaned and sanitised before processing restarts.

6 After major maintenance has been carried out, the Team Leader for that area shall ensure and sign off that all the maintenance personnel's tools, parts and chemicals can be accounted for.

7 All maintenance chemicals for processing areas shall be approved (this restriction does not apply to non-product areas) and all lubricants used in processing areas shall be food grade. All chemicals shall be labelled with that chemical's approved name.

General Criteria – Waste Disposal

1 Dropped meat:

Whole birds that fall onto a contaminated surface (floor, dirty machinery) will be washed in dedicated wash facilities using cold flowing potable (which may have extra chlorination).

Repetitive Faults Prevention: Process will be investigated re causes of why product is contacting non-product contact surface and consider re-design of the process.

Any product in any area that falls into a drain will be dumped.

Chicken pieces (skin on or off), de-boned meat and frozen pieces that fall onto a contaminated surface (floor, dirty machinery) will be dumped.

2 Dry waste:

Plastic liners, gloves and aprons, paper towels, cardboard and other litter are placed in rubbish bins strategically located throughout the plant.

Dry waste bins are emptied as required throughout the day and at the end of each day's operations into rubbish skips located outside of the plant.

All rubbish shall be stored in lidded containers outside of the plant.

Potentially physically or chemically contaminated packing and wrapping materials shall not be used to pack product unless the QA Officer confirms their integrity after an inspection. Damaged or contaminated packaging materials shall be disposed of with the dry waste.

NB: Any packing material suspected of biological contamination shall be disposed of immediately.

3 Wet waste:

A company can generally either treat their wet waste themselves through an internal waste water system or dispose of it through local council approval.

4 Unfit product:

Potentially unfit product is placed on hold for QA Officer inspection.

No unfit product is to be kept in the plant chillers or production areas unless it is well labelled and not posing a risk of contaminating fit product.

Any 'off' product shall be clearly identifiable and placed into a condemned product bin outside of the plant. Containers used for condemned material in the plant shall be clearly labelled 'CONDEMNED'.

Any product that is unfit for human consumption (inedible), but not condemned will be placed in a bin labelled 'INEDIBLE' and taken to pet food for non-certified orders.

By-products and inedible materials that are conveyed through any product area shall be contained and covered at all times.

All inedible containers shall have lids or be labelled clearly with the word 'INEDIBLE'. All condemned containers shall have lids or be labelled clearly with the word 'CONDEMNED'.

Containers and facilities used to convey inedible or condemned material from product areas shall be cleaned and sanitised before re-entering product areas. Sanitiser must be rinsed off thoroughly. A procedure shall be in place to ensure this.

Procedures

The following control measures are the responsibility of the Processing Supervisor:

Area	General Control	Monitoring	Corrective Action	Records
1. Premises and equipment cleaning	Premises shall be cleaned and sanitised regularly in accordance with criteria on previous pages.	Pre-start up inspection of processing equipment by Supervisor. Weekly inspection of premises by Supervisor.	Correct problem. Retrain staff.	Pre start check sheets. Weekly premises inspection record.
	Clean and sanitise all tools, equipment, trolleys, trays and forklifts prior to bringing into processing room from outside.	Visual inspection before entry into processing area.	Reclean.	Daily processing record
2. Premises and equipment design and construction	See IS2 (Industry Standard 2- Construction and design, as amended by TD 02/055 Poultry – Amendments to Industry Standard 2 (Construction and Design) and criteria on previous pages.	Check that all new processing areas conform to the criteria prior to birds entering it.	Fix area to meet criteria.	Use relevant criteria on previous pages and tick off each one checked. Add cover sheet with date, area checked, person doing check, signature etc)
3. Refrigeration Management	See previous pages. Birds ex immersion chiller 7°C or less. Birds ex chiller 4°C or less. Birds ex blast chiller 0°C or less. Birds ex blast freezer -15°C or less. Birds ex freezer -15°C or less.	Processing rooms, immersion chillers, chillers, blast freezers and freezer temperatures to be monitored at least daily. Bird temperature at exit of each control step to be measured at least 3 times a day.	Correct problem. Increase monitoring frequency.	Daily processing temperature sheet.

Area	General Control	Monitoring	Corrective Action	Records
4. Repairs and maintenance	Processing rooms and equipment to be maintained to meet criteria on previous pages.	Monthly processing inspection.	Correct problem. Retrain staff.	Monthly inspection record.
5. Waste disposal	All waste shall be disposed of as described in previous pages.	Daily processing inspection	Correct problem. Retrain staff.	Daily processing record

Records

Records identified above are to be correctly filled out and filed in the Processing Record Room for 4 years.

Operator verification

Once a month the Processing Manager shall check a defined % of all records to check that appropriate controls are working. Any problems shall be noted on the relevant record with the details of the corrective action taken.

Example R: Analysis / Control of Hazards and Other Risk Factors From Other Sources - Personnel

Scope

Hygiene management for all people (managers, staff, visitors and contractors e.g. maintenance workers, cleaners etc) in all areas appropriate to the RMP. It includes external and internal environs (processing areas, stores, amenities and any other support areas).

Requirements

Regulatory Requirements
1. Animal Products Regulations 2000, 12: Hygiene of persons whose presence or actions may result in contamination of animal material or animal product-- All risk management programme operators, persons who transport animal material or animal product from the place or premises of a primary processor, and other categories of person specified in specifications for the purposes of this regulation must ensure that persons, including visitors, whose presence or actions, at any premises or place where animal material or product is processed, may result in contamination of animal material or animal product-- (a) wear appropriate protective clothing, where necessary; and (b) follow an appropriate personal hygiene routine; and (c) behave in such a manner as may be necessary or desirable to minimise contamination to animal material, animal product, and associated things.
2. Animal Products Regulations 2000, 13: Persons infected by or carriers of disease or illness to be excluded from working areas or from handling animal material or product-- All specified persons must ensure that persons, including visitors, who are known to be, or suspected of being, infected by or a carrier of a disease or illness of public health concern (including a notifiable infectious disease listed in section A of Part 1 of the First Schedule of the Health Act 1956) that is likely to be transmitted through animal material, animal product, or associated things are precluded from-- (a) working in areas where animal material or animal product is processed, if that may result in contamination of animal product; or (b) handling animal material, animal product, or associated things that may result in contamination of animal product.

Regulatory Requirements
Animal Products (Specifications for Products Intended For Human Consumption) Notice 2002: 23 Health: 1. The operator must take reasonable measures to ensure that a person (including any visitor or contractor) who is — (a) infected with, or a carrier of, an infectious disease in a communicable form as described in Section A, Part 1, of the First Schedule of the Health Act 1956; or (b) suffering from acute respiratory infection; or (c) suffering from boils, sores, infected wounds, or any other condition that cannot be adequately protected from becoming a source of contamination — does not work as a product handler or enter an area where he or she may adversely affect the suitability for processing of animal material or the fitness for intended purpose of animal product.
2. A product handler, or any other person who may affect the suitability for processing of animal material or fitness for intended purpose of animal product, after suffering from an illness described in subclause (1)(a) or (b), must provide a certificate from a registered medical practitioner confirming that the person is no longer likely to contaminate the animal material or animal product, prior to resumption of work in that role.
3. A product handler, or any other person who may affect the suitability for processing of animal material or fitness for intended purpose of animal product, who suffers from a condition described in subclause (1)(c) must, before resuming work, be assessed by a suitably skilled person, nominated by the operator to confirm that the condition is no longer likely to contaminate the animal material or animal product, or that the handler or other person is adequately protected from being a source of contamination.

Operator-defined Requirements
4. Minimise contamination of animal product by hazards originating from personnel, contractors, and visitors.

Process flow diagram

N/a

Identify / Analyse Hazards and Other Risk Factors, and Determine CCPs

There are no CCPs for the hazards with non-measurable requirements as shown in the following table:

Sources of hazards	**Hazards reasonably likely to occur with each source**	**Current Control measures**	**Measurable requirement?**
People carrying pathogens in gut	B: *Salmonella* species B: Enteric pathogens	Handwashing and sanitising programme. Hygiene training. People with diarrhoea excluded from working in product contact areas for 24 hours after problem clears up.	No
People carrying pathogens up nose	B: Staphylococcus aureus	Hygiene training Handwashing and sanitising programme	No
Contaminated clothing / footwear	B: *Salmonella* species B: Enteric pathogens B: Staphylococcus aureus	Laundry procedures Protective clothing programme Boot wash facilities Foot baths	No
Person with exposed boils / sores	B: Staphylococcus aureus	Use of impervious gloves or covers OR Keeping personnel that fit the criteria in specification 23 (1) (c) away from product Assessment as required by specification 23 (3).	No

The CCP determination for the measurable requirements is shown in the following table.

Hazard or Risk Factor	Current Control measures, e.g. GHP / GMP CCPs	Is there a relevant measurable requirement ?	**Q1:** Is hazard reasonably likely to contact product? If yes, go to Q2. If no, not a CCP. Go to next hazard or risk factor.	**Q2:** Could the level of hazard exceed the measurable requirement? If yes, go to Q3. If no, not a CCP. Go to next hazard or risk factor.	**Q3:** Is there one or more new or improved controls that will achieve the measurable requirement? If no, go to Q4. If yes set up CCP to meet measurable specifications and also go to Q4.	**Q4:** Are there any other controls? If yes, redesign / establish GMP/GHP to meet remaining specifications. If no, and no CCPs list as uncontrolled. Consider at process analysis.
Product handler carrying infectious disease: B1: Salmonella species B2: Enteric bacteria B3: Staphylococcus aureus	None [80]	Yes – medical certificate available to state freedom from infectious disease	Yes	Yes	Yes – CCP6 Send to doctor.	Keep personnel that fit the criteria in specification 23 (1) (a) or (b) away from product wherever possible.

[80] If the operator had good control measures already in place, (e.g. Send ill staff to Doctor; obtain medical clearance before allowing return to work as food handler) then the answers to the questions would be different and a CCP would not be identified.

Determine Critical Limits for each CCP

CCP No.	CCP	Critical Limits
6	Personnel who find out they have infectious disease to notify Manager. Get medical Certificate.	Infected personnel to be kept away from product contact duties. Medical Certificate stating clearance to return to work to be viewed by Management prior to return to working in product contact areas.

General criteria for other controls

Policy
Training: Personnel shall be trained on: • Personal hygiene as it relates to product handling, • Requirement to notify manager if they find out they have an infectious disease as described above. This training shall be documented.
Visitors: Must be under supervision and must adhere to this policy and the hygiene requirements of the areas visited.
Health of Personnel. All staff or visitors or contractors who will handle product or are in the immediate vicinity of shall be apparently healthy. No person shall be employed until a pre-employment medical check has been performed. No person who is suffering from a disease (NZFSA spec) shall handle product. (Exclude other diseases the industry has no control or interest over e.g. AIDs etc.) The company representative has the right to refer the person to the Occupational Health Nurse or Medical Practitioner if necessary. Clearance is required following any concerns or absences as specified above.
Skin Lesions and Injuries: Skin lesions include dermatitis, psoriasis and viral skin infections e.g warts shall be covered to minimise product contamination. Injuries involving broken skin surface or burns shall be covered. Dressings shall be waterproof e.g. a glove used on all hand dressings, maintained in sanitary condition and adequately secured to avoid dislodgement. If plasters are used they must be brightly coloured.

Hygiene Practise:

Hands shall be cleaned using an approved product as often as necessary and at a minimum:

- Upon entering or leaving any processing
- Upon entering any packaging areas
- Before handling products
- Before handling product packaging
- After completing a messy function and/or handling waste
- After visiting the toilet.

Fingernails must be kept cleaned and must not be excessively long unless covered by gloves.

Footbaths shall be used on entry to processing areas.

Wearing of fingernail polish, watches, jewellery such as rings, bracelets, earrings and other items that may constitute a food safety hazard are not permitted in the processing plant.

All hair, including full beards must be covered in product contact areas.

Eating, drinking and chewing gum are not permitted in any processing or storage areas. Smoking is only permitted in designated areas.

Sneezing, coughing or touching the face, mouth or nose shall be avoided. Hands shall be washed after each episode.

Protective Clothing Storage & Usage.

All people entering the processing area shall wear suitable clean outer protective clothing, a hair cover and gumboots/overshoes provided.

Where protective clothing/equipment is stored in lockers, there shall be provision for physical separation from all other items e.g gumboots must have a separate compartment from other personal items.

Staff engaged in outside duties shall not engage in processing duties unless footwear and outer clothing has been changed, and hands washed/ sanitised.

Protective clothing shall not be worn off site.

Protective clothing shall cover at least street clothing.

Footwear (gumboots) shall be capable of being effectively cleaned and sanitised prior to entry to a product area.

Product handlers sleeves shall be rolled up above the elbow or protective waterproof coverings over sleeves below the elbow.

A fresh set of clean protective clothing shall be obtained at the beginning of each day and if excessively soiled. Freezer suits shall be cleaned at a frequency, which maintains them as visually clean.

Persons shall change clothing and wash hands when required to move from a “primary area” e.g. (hanging bay, kill and evisceration rooms) to a “secondary area” e.g. (cutting, de-boning, packing area).

Gloves shall be worn when required for personal or product protection. All gloves including mesh gloves, shall be washed and sanitised, or changed at least during breaks in production or if soiled.

Reusable aprons shall be cleaned at each break. Disposable plastic sleeves shall be replaced at each break in production. Reusable plastic sleeves shall be cleaned every break.
Equipment provided to personnel including safety equipment shall be maintained in a hygienic condition.
Laundering of Protective Clothing. Home laundering is not permitted. All soiled clothing shall be returned to the laundry for cleaning daily. Clean clothing shall be stored in a clean environment. There shall be a dirty to clean process flow of clothing through the laundering process.

Procedures

The following procedures are the responsibility of the Processing Supervisor.

Hazard source	**General Control**	**Monitoring**	**Corrective Action**	**Records**
People carrying pathogens in gut	All staff to wash hands prior to handling product.	Supervisor to check when in area.	Retrain staff. Warn repeat offenders.	Daily Processing Record.
	People with diarrhoea excluded from working with product for 24 hours after problem clears up.	N/a	Retrain staff.	Daily Processing Record.
People carrying pathogens up nose	All staff to wash hands prior to handling product.	Supervisor to check when in area.	Retrain staff. Warn repeat offenders.	Daily Processing Record.
Contaminated footwear	All people to use footbaths before entering processing rooms. Sanitising footbaths to be changed at every break or when soiled.	Supervisor to check when in area.	Retrain staff. Warn repeat offenders.	Daily Processing Record.
Contaminated clothing	Clean protective clothing to be worn when handling product.	Supervisor to check when in area.	Retrain staff. Warn repeat offenders.	Daily Processing Record.

Hazard source	General Control	Monitoring	Corrective Action	Records
Product handler carrying infectious disease	Medical Certificate stating clearance to return to work to be viewed by Manager prior to return to working in product contact areas.	Manager to check.	Staff to work in other area or be sent home. Retrain staff. Warn repeat offenders.	Daily Processing Record.
Person with exposed boils / sores	Cover with of impervious gloves or covers.	Supervisor to check covering.	Retrain staff. Warn repeat offenders.	Daily Processing Record.

Records

Records identified above are to be correctly filled out and filed in the Processing Record Room for 4 years.

Operator verification

Once a month the Processing Manager shall check a defined % of all records to check that appropriate controls are working. Any problems shall be noted on the relevant record with the details of the corrective action taken.

Example S: Analysis / Control of Hazards and Other Risk Factors From Other Sources - Air

Scope

Includes process room atmosphere from post pluck wash onwards. Areas prior to this are considered to be contaminated so are not subject to the same requirements.

Requirements

Regulatory Requirements
If compressed air is generated on the premises refer Specification 16 of the Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, 16. Compressed air: (1) When compressed air is generated on site for the purpose of processing, the air must be filtered and the source must be clean and external to the building. (2) The filters for filtering air that is used in contact with animal material or animal product, must comply with . (a) the current International Organisation for Standardisation Standard on "Compressed Air for General Use Part 1, Contaminants and Quality Classes": Ref. No. ISO 8573.1, 1991; or (b) any other international standard recognised by the Director-General.

Operator-defined Requirements
4. The exposure of product to the environmental atmosphere during production shall result in minimal microbial contamination or growth and nil physical contamination.
Air entering spin chillers is to be filtered.
There is to positive air pressure in secondary processing in order to exclude contaminated air.
Industry Standard 2, 5.3: Ventilation systems should be designed to take into account such factors as the size of the premises, the number of persons working within product areas, heat gain (e.g. from equipment or product load), water emission, relative humidity, condensation and general climatic conditions. Air intakes should be located and constructed so that contamination from exhaust stacks, roof-deposited debris (e.g. faecal material from birds) or other environmental contamination cannot be taken into the process area. Air intakes to product areas should be provided with an effective filtration stage. Filters should be capable of withholding particles that have the potential to cause contamination of the product and process environment. The choice of filter should be in accordance with the conditions of use. This will depend on the nature of the product and process, and the size, nature and concentration of the particulate matter to be removed. All ventilation air to product processing areas should be filtered through air filters that at least comply with the standard set out in Class EU5, DIN 24-185 Part 2.
There shall be planned maintenance systems for ventilation equipment and filters.

Operator-defined Requirements
Filters should be readily removable for replacement or cleaning.

Process flow diagram

N/a

Identify / Analyse Hazards and Other Risk Factors, and Determine CCPs

There are no CCPs for the hazards with non-measurable requirements as shown in the following table:

Sources of hazards	**Hazards reasonably likely to occur with each source**	**Current Control measures**	**Measurable requirement?**
Contamination from exterior environment	B: Enteric pathogens, *e.g.* *Salmonella* species W: Physical contaminants such as dust, leaves, paint, insects.	Filtration of air going into processing rooms. Positive air pressure inside secondary processing rooms.	No
Contamination from internal environment	B: Enteric pathogens, e.g. *Salmonella* species W: Physical contaminants such as dust, leaves, paint, insects.	Filtration of air going into processing rooms. Positive air pressure inside secondary processing rooms. Equipment to be shielded as much as possible to minimise cross contamination through aerosols.	No

CCP Determination

There are no CCPs for the non-measurable requirements. Existing filters meet the requirements.

Determine Critical Limits

Not applicable as there are no CCPs.

Procedures

The following procedures are the responsibility of the Engineer.

Area	General Control	Monitoring	Corrective Action	Records
Air filters for processing rooms	Maintenance programme for filters – check wear and tear and clean monthly or following dust event	Monthly visual check by maintenance and upon cleaning	Repair. Replace as necessary. Retrain staff.	Invoices. Maintenance register.
Compressed air to spin chiller	EU spec in HC Spec 16	Monthly visual check by maintenance and upon cleaning	Repair. Replace as necessary. Retrain staff.	Invoices. Maintenance register.
Secondary processing	Positive air pressure barrier	Check direction of air flow at all entries	Get engineers to review and improve system.	Maintenance register.

Records

Records identified above are to be correctly filled out and filed in the Processing Record Room for 4 years.

Operator verification

Once a month the Processing Manager shall check and sign the records for that month. He shall also do a simple airflow checks by opening doors and checking airflow direction. Any problems shall be noted on the relevant record with the details of the corrective action taken.

Example T: Analysis / Control of Hazards and Other Risk Factors From Other Sources - External environs

Scope

This relates to all external areas inside the physical boundaries of the RMP.

Requirements

Regulatory Requirements
N/a

Operator-defined Requirements
1. All entrances to the processing premises shall be kept clean at all times. Any contamination must be cleaned up as soon as possible.
2. All outside areas shall be maintained in a tidy condition. Waste shall be suitably contained/covered.
3. Livestock crates shall be washed in an area and in a manner that minimises cross contamination of processing areas and air intakes to processing areas.
4. All external doors to processing premises shall be kept closed when not in use.

Process flow diagram

N/a

Identify and Analyse Hazards and Other Risk Factors

Sources of hazards	**Hazards reasonably likely to occur**	**Current Control measures**	**Any measurable requirement?**
Live birds	B: Enteric pathogens, e.g. *Salmonella* species	Keep to defined area. Housekeeping of livebird reception area. Washing and sanitising of livebird crates and trucks in an area that minimises contamination of processing.	No

Contaminated areas	B: Enteric pathogens, e.g. *Salmonella* species B: Environmental pathogens, e.g. *Listeria monocytogenes*	Housekeeping. Proper waste control. Controls on staff movement. Change of footwear / protective clothing. All doors closed.	No

CCP Determination

There are no CCPs for the non-measurable requirements.

Determine Critical Limits

There are no CCPs so there are no critical limits. For the non-CCP requirements establish procedures for current control measures.

Procedures

The following procedures are the responsibility of the Processing Supervisor.

Area	**General Control**	**Monitoring**	**Corrective Action**	**Records**
External environment	Housekeeping and waste control to be done on continuous basis.	Monthly inspection	Clean up problem area. Increase inspection frequency. Retrain staff.	Monthly Inspection Record
	External doors to processing to be closed except when in use.	Monthly inspection	Close doors or set up self-closing systems. Increase inspection frequency. Retrain staff.	Monthly Inspection Record
	Allocate “dirty” areas where processing staff may not go unless they change footwear and protective clothing before re-entering processing.	Supervisors to monitor continuously.	Retrain staff. Warn repeat offenders.	Processing Records.

Live bird crates and trucks	Washing and sanitising in area where cross contamination of processing is minimised. Clean up of area at end of each day's kill.	Monthly inspection.	Clean up problem area. Increase inspection frequency. Retrain staff.	Monthly Inspection Record

Records

Records identified above are to be correctly filled out and filed in the Processing Record Room for 4 years.

Operator verification

Once a month the Processing Manager shall check a defined % of all records to check that appropriate controls are working. Any problems shall be noted on the relevant record with the details of the corrective action taken.

Example U: Analysis / Control of Hazards and Other Risk Factors From Other Sources - Pests

Scope

Includes pest control for all areas appropriate to the RMP, (including the production of animal product for animal consumption where relevant). It includes all relevant external and internal environs (stores, amenities and any other support areas).

Requirements

Regulatory Requirements
1. Animal Products Regulations 2000, Reg 11 – Hygiene of processing environment: (1) All specified persons must establish and carry out effective procedures to-- (a) ensure appropriate and adequate maintenance, cleaning, and sanitation of processing premises, places, facilities, essential services, and equipment (including conveyances); and (b) manage waste; and (c) control pests.
2. Approved maintenance compounds (pesticides) to be labelled with the name or names of the maintenance compound as so approved, or as they appear in the list of approved maintenance compounds contained in NZFSA's Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 (Refer to http://www.nzfsa.govt.nz/animalproducts/legislation/notices/m15-chem-schedule-all.pdf).

Operator-defined Requirements
3. Pests must be excluded from the premises to the extent practicable.
4. Ongoing monitoring for infestation must occur. Where an infestation is detected it must be dealt with in a timely and effective manner.
5. Good hygienic practice must be used to avoid creating an environment conducive to pests.
6. Chemical, physical or biological measures used to minimise the access of pests to the product must not present a hazard. Where chemicals are used for this purpose, only approved chemicals as listed in NZFSA Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 (Refer to http://www.nzfsa.govt.nz/animalproducts/legislation/notices/m15-chem-schedule-all.pdf). Directions and conditions for use must be followed.
7. Pest management system must be documented and records maintained.
8. All pesticides on a premises shall be listed in an inventory

Operator-defined Requirements
9. The access, handling and use of pesticides shall be under the supervision of trained personnel.
10. Pesticides shall only be used according to the directions of the manufacturer and subject to the conditions of the authorisation.
11. All practical steps shall be taken to ensure vermin cannot gain entry to poultry housing and feed sources. All premises shall be wild bird proof.
12. There shall be a documented effective pest control system in place. Vermin includes any pests that may carry disease such as insects, rodents, wild birds and animals.

Process flow diagram

For chemical pesticides, refer to earlier example.

Identify and Analyse Hazards and Other Risk Factors

Sources of hazards	**Hazards reasonably likely to occur with each source**	**Current Control measures**	**Is there a relevant measurable specification?**
Chemicals used for pest control	C: use of unapproved chemicals	Only purchase approved chemicals. Comply with conditions of approval and manufacturer's instructions for use.	Yes = See Example P
Flies, cockroaches and other insects	B: enteric pathogens, e.g. Salmonella Species. B: Environmental pathogens, e.g. *Listeria monocytogenes*.	External environs: Ground maintenance, e.g. foliage, grass Waste control Internal environs: Self closing doors Housekeeping programme Screens (windows/doors)	No
Rats and mice	B: enteric pathogens, e.g. Salmonella Species. B: Environmental pathogens, e.g. *Listeria monocytogenes*.	External environs: Waste control Drain traps Bait stations (rodenticide) Internal environs Bait boxes Drain traps Housekeeping programme	No

Birds	B: enteric pathogens, e.g. Salmonella Species. B: Environmental pathogens, e.g. *Listeria monocytogenes*.	External environs: Bird deterrents (noise makers, foliage removal) Waste management	No
Cats, dogs, stoats and ferrets	B: enteric pathogens, e.g. Salmonella Species. B: Environmental pathogens, e.g. *Listeria monocytogenes*.	External environs: Fencing Traps Waste management	No

CCP Determination

There are no CCPs for the non-measurable specifications. The CCP determination for measurable specifications for pest control chemicals has already been covered in Example P.

Determine Critical Limits

Not applicable as the only CCP is associated with chemical control. This has already been covered in Example P. For non-CCPs establish procedures for current control measures.

Procedures

There shall be a documented pest control system in place for the layer farm. This shall include:

- A summary of the physical controls that are in use to prevent entry of pests into processing and associated buildings, etc. e.g. self closing doors, insect screens etc.

e.g.

Physical Controls
The following physical controls are used to prevent entry of pests into processing and associated buildings: • self closing doors, • drain screens, • insect screens, • wild bird deterrents (e.g. scarecrows, use of nylon lines to prevent landing on roosting areas). These controls shall be kept in place all year, even when processing buildings are empty. All storage facilities shall be pest proof and waterproof. Potable water storage facilities shall be pest proof. i.e. all tanks shall be enclosed with lids on.

- A summary of the internal and external housekeeping / maintenance system used to minimise anything that may attract /harbour pests, e.g. waste control, mowing of long grass, etc

e.g.

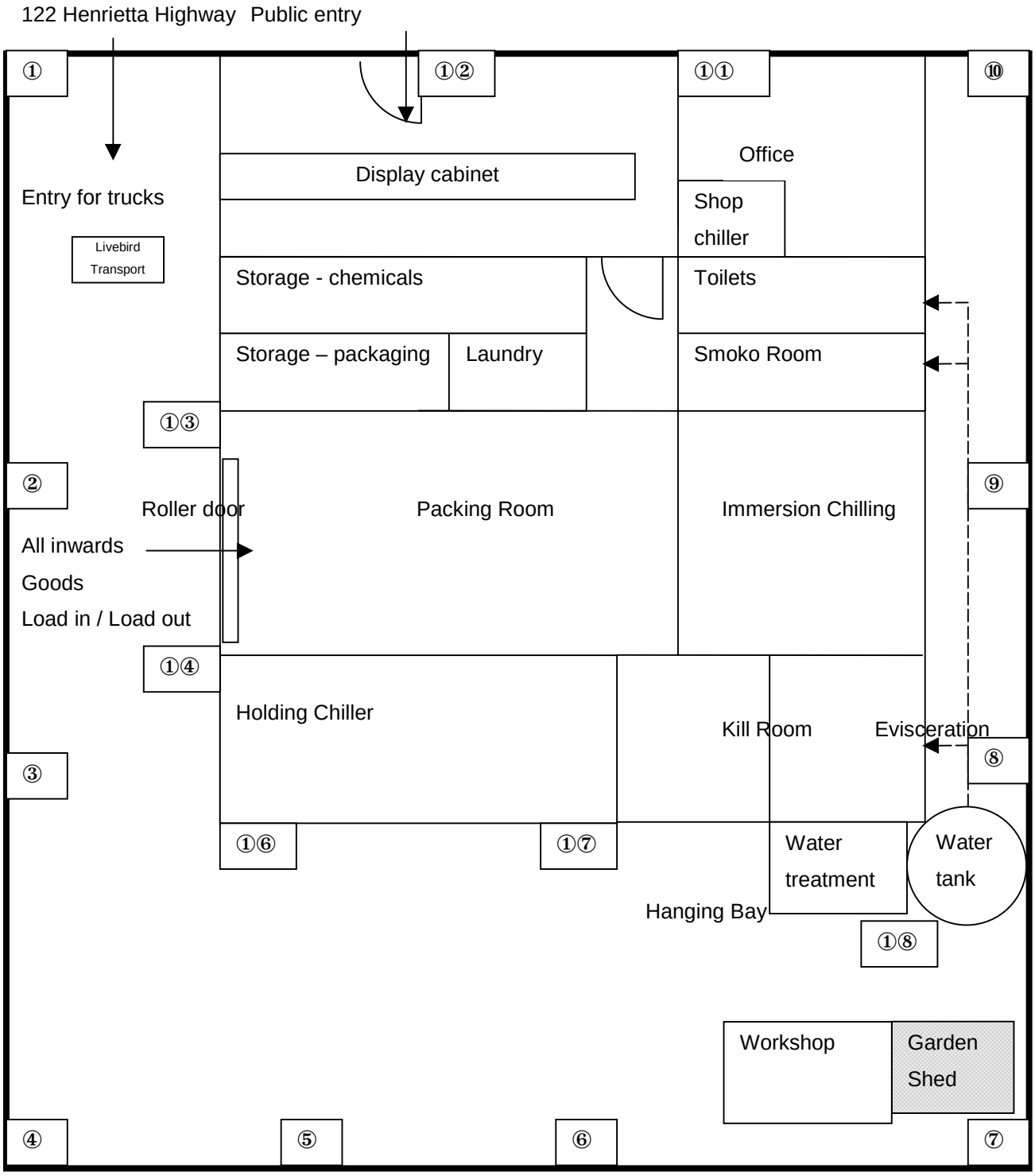
Housekeeping / Maintenance
The area immediately surrounding the processing building shall be kept free of trees, long grass, and any other rubbish or debris that may attract or provide cover for pests. All animals (eg cats and dogs) shall be denied access to any processing or associated buildings. Waste shall be enclosed in bins until removal.

- A pesticide system. This shall consist of:
  - a diagram of the farm, or a list showing all bait stations, bait boxes, traps etc used for pest control. Each of these shall be uniquely numbered,
  - the name and proof of registration of the pest controller,
  - a list of the pesticides that are used,
  - the frequency of inspection of the pest control points,
  - records of all chemical use, evidence of pest activity and corrective action taken.

e.g.

Pesticide System
Appropriate measures shall be taken to control pests around the processing buildings. This includes: • Use of bait stations. See site diagram showing their unique numbers and locations. • Use of sticky fly-paper to capture insects. • Use of insecticides – only when necessary. • Use of a registered pest controller to (weekly, fortnightly or monthly depending on performance) check the bait stations and take appropriate corrective action. Name of Pest Control Company = No Flies No Me Ltd. A copy of the company's Registration Certification is kept in the Approved Supplier File. • Use of approved pest control chemicals as listed in NZFSA Approved Maintenance Compounds, Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 (Refer to http://www.nzfsa.govt.nz/animalproducts/legislation/notices/m15-chem-schedule-all.pdf). • Records shall show all pest control activities, dates, chemicals used, quantities, any evidence of pest activity and any corrective action taken.

All items inside the dark line (which represents the land boundaries) are included in the risk management programme except the garden shed - see shaded building.



Monitoring

The Processing Supervisor shall do a weekly inspection of the internal and external environment to check on the effectiveness of the physical controls and the housekeeping / maintenance system. Pest Control Record 2 shall be filled out for each inspection.

The monitoring of the pesticide system shall be done by the Pest Controller. Pest Control Record 1 shall be filled out each time monitoring is done.

Corrective Action

When the monitoring finds problems with the controls appropriate corrective action shall be taken. This may include fixing the physical controls, increasing housekeeping frequencies, retraining staff, increasing inspection frequency, increasing pest control points, changing pest control chemicals etc.

Records

The Pest Control record forms mentioned above shall be filled out correctly and stored for 4 years in the Processing Record Room.

Operator verification

Once a month the Processing Manager shall check and sign the records for that month. Any problems shall be noted on the relevant record with the details of the corrective action taken.

2.9 OPERATIONAL AUTHORITIES AND RESPONSIBILITIES

Work out the names, titles or designations of the people that are responsible for monitoring, corrective action and verification activities for CCPs and other controls. Ensure that these are written into the relevant procedures within the RMP and into any position descriptions.

These people should be given task related training as well as training similar to that shown in example N below. Keep training records to verify that this has been done. (NB: The suggested training is for red meat as there are no equivalent poultry courses. It is planned to eventually establish generic HACCP unit standards to cover industries that do not have specific standards of their own).

Example V: Training for those with RMP authorities and responsibilities

Authorities and responsibilities	**Including**	**Training**
Monitoring activities	Observations; Inspection; Testing.	An appropriate supervisor competency standard e.g: NZQA Unit Standard 12624: Monitor a meat processing operation under a HACCP System.
Corrective action activities	Restoration of control; Control and disposition of nonconforming product; Prevention of recurrence.	An appropriate supervisor competency standard e.g.: NZQA Unit Standard 12625: Supervise a meat processing operation under a HACCP System.
Operator verification activities	Validation and revalidation (where necessary); Ongoing audit or review.	An appropriate HACCP coordinator competency standard e.g.: NZQA Unit Standard 12626: Coordinate the development and verification of a HACCP plan for a meat processing operation.
Generic Corrective Action	Management of unforeseen non-complying product; Sending a report of above actions to an Animal Product Officer.	An appropriate HACCP coordinator competency standard e.g.: NZQA Unit Standard 12626: Coordinate the development and verification of a HACCP plan for a meat processing operation.
Recall Procedures	Recall management; Notifying Director, Animal Products, NZFSA when recall initiated.	An appropriate HACCP coordinator competency standard e.g.: NZQA Unit Standard 12626: Coordinate the development and verification of a HACCP plan for a meat processing operation.

2.10 GENERIC CORRECTIVE ACTION PROCEDURE

There are times when something unforeseen goes wrong. The poultry processor must have a procedure to cover these situations.

Example W: Generic Corrective Action Procedure

Scope:	Procedure to be used when an unforeseen event occurs that puts food safety, wholesomeness, labelling and animal safety at risk or introduces new potential risk factors that are not covered by the standard corrective action procedure as set down in the registered risk management programme.
Instances where this may occur:	Product has been produced by a process that deviates from the registered risk management programme. Product not in compliance with the outcomes of the registered risk management programme. Unforeseen risk factor has occurred affecting the food safety, wholesomeness, labelling and animal safety of the product. Specific corrective action in the registered risk management program has not been complied with. Unidentified corrective action in the registered risk management programme.
Procedure:	Product to be identified, isolated and put on hold pending a full assessment. This shall be reported to the Day-to-day Manager of the RMP. The Day-to-day Manager of the RMP appoints a suitably qualified person to analyse the situation. The suitably qualified person will analyse the situation. The analysis is to include the review of records, reports, product and assess the fitness for purpose of the product. Recall procedures to be implemented if deemed necessary. All findings are to be recorded.
Records of deviation or non-compliance shall be recorded as follows:	What the deviation is and ID of any affected material/ product. The impact of any hazards or other risk factors associated with the deviation. The analyses made to determine disposition of product and details of verification of the decision. Verification of the disposition. Eg. Any additional processing of affected product. Preventative actions to prevent recurrence. The suitably qualified person will complete and sign a report which will be copied to the Director-General or an Animal Products Officer as soon as practicable. The incident shall be reported to the accredited verifier at the next verification visit.
Reference	Animal Products (Risk Management Programme Specifications) Notice 2000 specifications 12 and 13.

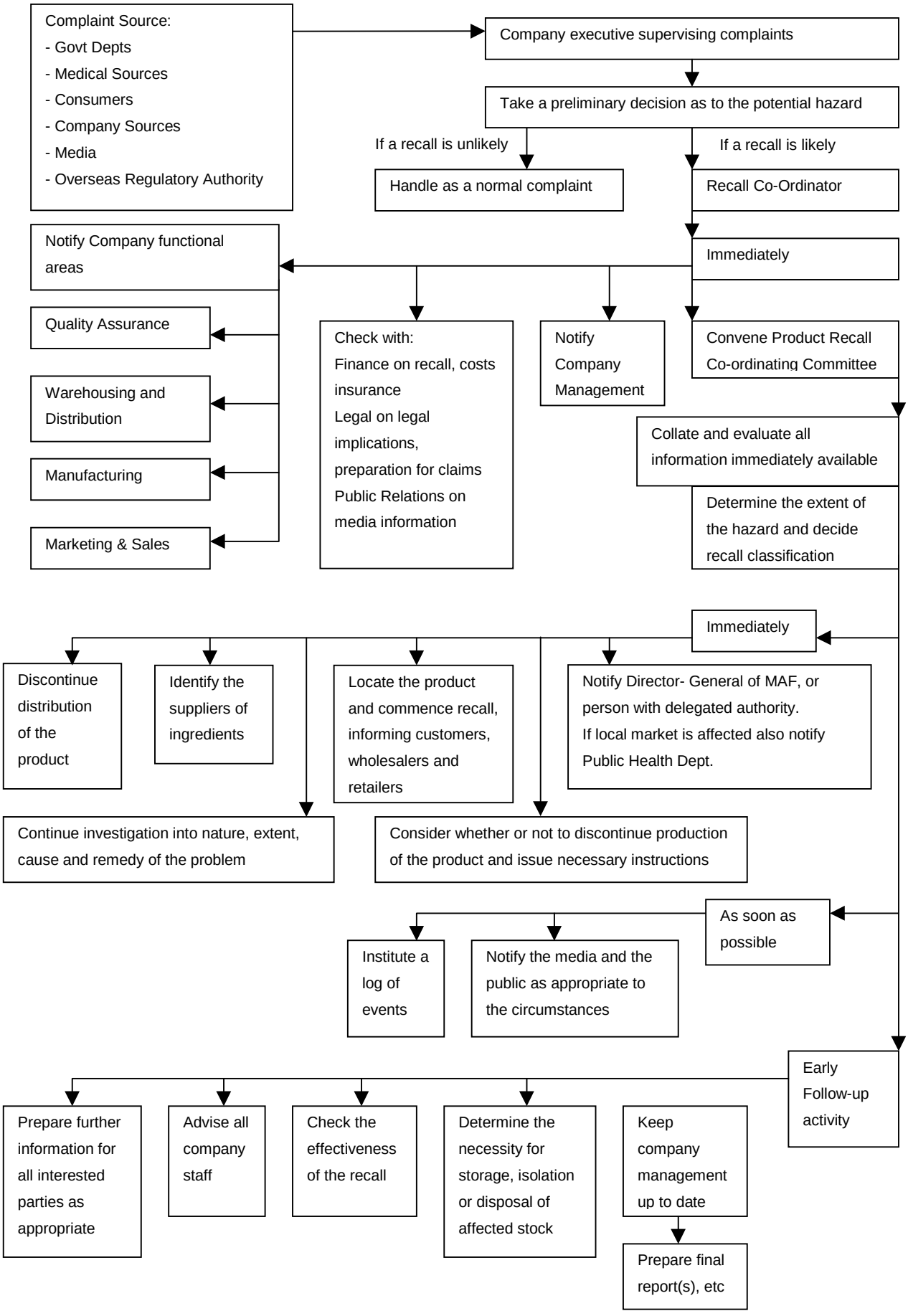
2.11 RECALL PROCEDURE

The poultry processor must document procedures to enable recall of animal product, where it is found to be unfit for intended purpose or not identified or labelled correctly. This recall procedure should cover the situations when the operator recalls product voluntarily, and when the recall is required by the Director-General, under section 85 of the Animal Products Act 1999. The procedure must also prompt the operator to notify the Director-General, or delegated person as appropriate, as soon as practicable when animal product is recalled because it is or may not be fit for its intended purpose.
There are a number of guidance documents already available which may assist the operator to develop appropriate recall procedures. These include:

- Recalls – Formerly issued by Ministry Of Health as section 15 of their Food Administration Manual. Now available from NZFSA, P O Box 2835, Wellington.

- Meat Industry Standards Council Circular 99/MISC/6: Recall Procedures for Meat and Meat Products. This is available at the Meat industry Association's web site at http://www.mia.co.nz/misc_circulars/99misc6.doc.

Example X: Recall Procedure



2.12 OPERATOR VERIFICATION

The operator must make provision for operator verification activities, as shown in the example below.

Example Y: Provision for Verification Activities and Verifiers' Rights

Validation:	The operator has partially validated this RMP. Refer to section Example Z1 for further information.
Routine Verification:	Routine operator verification of each RMP component has already been described in the documentation of each component.
Audit:	In addition to the above verification activities, once a month the Day-to-day Manager of the RMP shall select an RMP component, and shall audit it to ensure that it is implemented effectively. The audit shall check that: • staff understand the requirements and are following procedures correctly, • monitoring and appropriate corrective action is occurring, and • records are being correctly and accurately filled out. Each time a component is audited the Manager shall write a brief report outlining the component audited, findings and any corrective action taken as a result of the findings. These reports will be filed in the Manager's filing cabinet. The Manager shall sign the records for that month. Any problems shall be noted on the relevant record with the details of the corrective action taken.
Microbiological testing	All poultry RMP operators are expected to participate in the National Microbiological Database programme. This will be a condition of the registration of the RMP. Refer to NZFSA web site for details: http://www.nzfsa.govt.nz/meatdoc/programmes/nmd/poultry/index.htm.
Ongoing Review:	The Dar-to-day Manager of the RMP shall also review the whole RMP: • at least once a year, and • when the operation changes and • when problems arise. If necessary the Manager shall ensure that the RMP is updated; or amended, revalidated, re-evaluated and re-registered.

2.12.1 Operator validation of the RMP

Validation requirements are explained in NZFSA's Risk Management Programme Manual. Expert advice may also be needed. The following activities are necessary to demonstrate validity.

Completeness of documentation

The operator must check that the RMP documentation is complete, i.e. it includes all of the required components and covers the requirements of relevant animal product standards and specifications.

Confirmation of Product Outcomes

Now that hazards have been identified for each process, inputs and other sources, go back and review the product outcomes in Examples D1 – D4 and confirm that they are reasonable and achievable. Also check that the outcomes for risks to wholesomeness and risks from false or misleading labelling are reasonable.

Implementation and achievement of product outcomes

Validation of the risk management programme must demonstrate that it consistently achieves the defined product outcomes at plant design capacity by:

- measuring finished product parameters (where appropriate);
- assessing the effectiveness of specific critical control points (either individually or cumulatively) and other controls.

The operator should collect and assess validation information to determine whether control measures achieve or contribute to the achievement of each relevant outcome on an ongoing basis. These control measures will be within the process and in supporting systems. This information may include:

- historical data/records;
- records demonstrating compliance (for controls other than CCPs);
- published scientific information;
- codes of practice and guidelines;
- trials and experiments;
- predictive modelling.

Revalidation

A revalidation of the RMP is required whenever changes are made (e.g. changes to premises, product, process, intended use of the product) that could have a significant impact on hazards or other risk factors and their controls, or when process failure that may compromise product outcomes.

Incomplete validation

Where there is inadequate evidence to demonstrate ongoing achievement of product outcomes, the risk management programme cannot be fully validated. If the operator wants to trade the animal material or animal product then they must go through the validation, evaluation and registration processes before commencing processing (otherwise any animal material or animal product produced must be burnt or buried). If the validation data is incomplete or not yet available, then the operator must provide adequate evidence to:

- demonstrate that the document is complete (except for validation); and
- indicate that the risk management programme is capable of achieving established product outcomes, e.g. using predictive modelling.

The operator must develop a protocol outlining the means by which the data will be collected in a scientifically-sound and statistically-valid manner to complete the validation after registration. This may be quite a basic protocol if the process is similar to current industry practice. If however, the process is unique, then a detailed protocol is necessary. It may be difficult to write up a practical validation protocol for novel processes. In this case the operator may want to document multiple validation options, or to allow for changes to the protocol with the evaluator's agreement, so that if the protocol proves to be impractical there are some alternatives without breaking the conditions of the registration. The operator can then apply for recognition of validity of the risk management programme from an accredited evaluator and obtain registration with conditions before commencing operations under the risk management programme. Once registered, the operator must operate the risk management programme according to the conditions of registration and collect the required data to complete validation. The operator must then obtain full recognition of validity from an accredited evaluator and forward a report to the Director, Animal Products. The Director may then alter or remove the conditions of registration for that risk management programme.

Example Y1: Validation for Raw Whole Chicken Product Outcomes

Biological Product Outcome:

To minimise presence of Salmonella in the product to a level not exceeding a specified target (which should be stated in individual RMPs). (The National Microbiological Database for broilers is expected to provide information for establishing targets for *Salmonella* and *E. coli)*.

Guidance on Validation of this Outcome.
This product outcome is expected to be achieved by providing adequate control measures at the washing steps (CCP1a, 1b & 1c) and at immersion chilling (CCP2 for carcasses and CCP4 for edible offal) together with effective prerequisite programmes (e.g. cleaning and sanitation, hygienic processing, refrigeration management). The use of microbiological observations is appropriate for evaluating the adequacy of the process to achieve product outcome 1. Microbiological data may be obtained from relevant published scientific literature, in-house historical data, and/or by gathering new data. Scientific evidence from published literature may be used to justify the effectiveness of a control measure applied at a specific step or steps. The use of published information will be a sufficient basis for validation only if it can clearly be shown that the conditions or variables considered in the scientific study are applicable to those existing in the process being validated. However, microbiological testing of products as an on-going verification activity may still be required. Premises that have previously collected microbiological data may use this historical information for evaluating the CCPs in relation to the achievement of the product outcome. Historical data may be used provided there has been no change in the product and process from the time the data were collected, sampling and the analytical tests are based on standardised methods and the amount of data available is adequate for validation. When published scientific information or historical data is not available or is inadequate, microbiological validation will involve the collection of new data from the time that the HACCP plan is implemented. The following are factors which should be considered when developing an appropriate design for microbiological validation in the absence of benchmark or historical data: Sample size: Number determined by statistical techniques. Sample time frame: Random selection of samples taken over a specified processing period. Methodology: Samples to be taken and tested as per current NMD protocol. Each of the relevant CCPs should also be validated to show that they can operate as planned. Records from at least 10 processing days will be needed to demonstrate the efficacy of these steps.

Chemical Product Outcome:

To ensure that chemical residues in the product do not exceed specified targets as monitored by the NZFSA Broiler Chemical Residue Monitoring Programme.

Guidance on Validation of this Outcome.
Product outcome 2 is expected to be achieved by ensuring that live birds are sourced from producers that comply with the whole flock health scheme which has been considered in this plan as a supporting system. Compliance with the scheme, as it relates to chemical residues, is verified under the NZFSA Broiler Chemical Residue Monitoring Programme. Validation of this outcome could be by: A summary of the processing plants' results to date versus the maximum residue limits: • How many samples have been tested? • What were they tested for? • What were the results? • Are there enough results to give confidence in the system? If any results were outside these limits then the processing plant will need to show the corrective action that has been taken by them, their livestock supplier and their feed supplier as appropriate. The processing plant will need to demonstrate that the changes have been effective. Validation could also be done by an independent audit of the chemical residue control programmes against the relevant NZFSA requirements for the processing plant, livestock supplier and feed supplier.

Wholesomeness Product Outcome:

To minimise "unwholesome" product to specified levels (refer to actual product outcome for levels).

Guidance on Validation of this Outcome.
This outcome is expected to be addressed by the provision and training of adequate numbers of staff at the examination and grading steps (3a, b &c) together with the vigilance of staff in secondary processing departments. Validation is likely to be achieved by the collection of carcass assessment sheets, say for 10 processing days (need to discuss) showing that the percentage of checked carcasses that had each of the identified issues was below the stated level in the above product outcome.

Labelling Product Outcome:

Guidance on Validation of this Outcome.
This outcome is expected to be addressed by the checking of proofs of new labels before ordering them, and then by checking that the labels on the packaging in use at each packing station matches the product that is being packed there. Validation is likely to be achieved by the collection of finished product audit sheets, say for 10 processing days (need to discuss) showing that all of the labelling was correct.

Validation of product outcomes for other products will also need to be done.

2.13 PROVISION FOR EXTERNAL VERIFICATION

The operator must make provision for verification activities and verifiers rights, as shown in the example below.

Example Z: Provision for Verification Activities and Verifiers' Rights

123 Poultry Limited authorises accredited verifiers to have the freedom and access necessary to allow them to carry out verification functions and activities, including -

(a) having access to all parts of the premises or place and facilities within the physical boundaries of or relating to the risk management programme; and

(b) having access to all documentation, records and information relating to, or comprising, the risk management programme (including records held in electronic or other form); and

(c) having freedom to examine all things necessary and open any containers, packages and other associated things to inspect their contents; and

(d) having freedom to identify or mark any animal material, animal product, equipment, package, container or other associated thing; and

(e) having freedom to -

(i) examine and take samples of any animal material, animal product or any other input, substance, or associated thing which has been, is, or may be in contact with, or in the vicinity of, any animal material or animal product; and

(ii) test, or analyse, or arrange for the testing, or analysis of such samples; and

(iii) order retention of raw materials including animal material, ingredients, animal products, packaging or equipment pending testing results and decisions on disposition; and

(f) having authority where there may be significant risk to fitness for intended purpose of animal product or suitability for processing of animal material to detain any animal material and animal products or other relevant things in the event of non-compliance with the risk management programme; and

(g) having authority in cases of significant risk to fitness for intended purpose of animal product or suitability of animal material for processing to intervene and direct a temporary interruption of processing until the cause of the risk has been remedied.

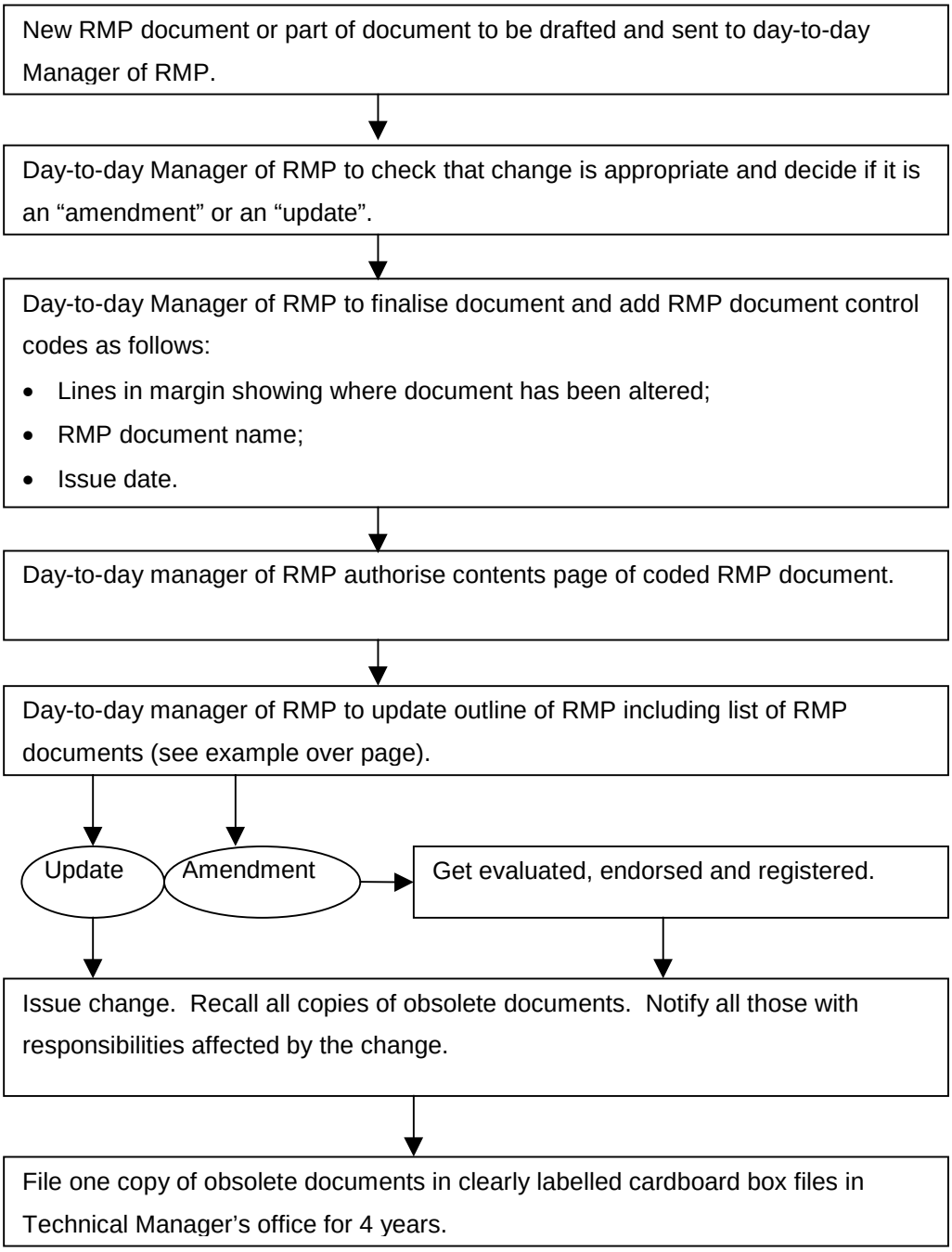
123 Poultry Limited requires accredited verifiers to comply with the company's biosecurity access requirements and occupational safety and health requirements.

2.14 DOCUMENTATION AND RECORD KEEPING REQUIREMENTS

2.14.1 Document control

The operator must have a document control procedure to ensure that the documents that make up the risk management programme are managed to meet relevant specifications. An example of such a procedure is given below.

Example AA: Document Control Procedure



Example BB: RMP Document List

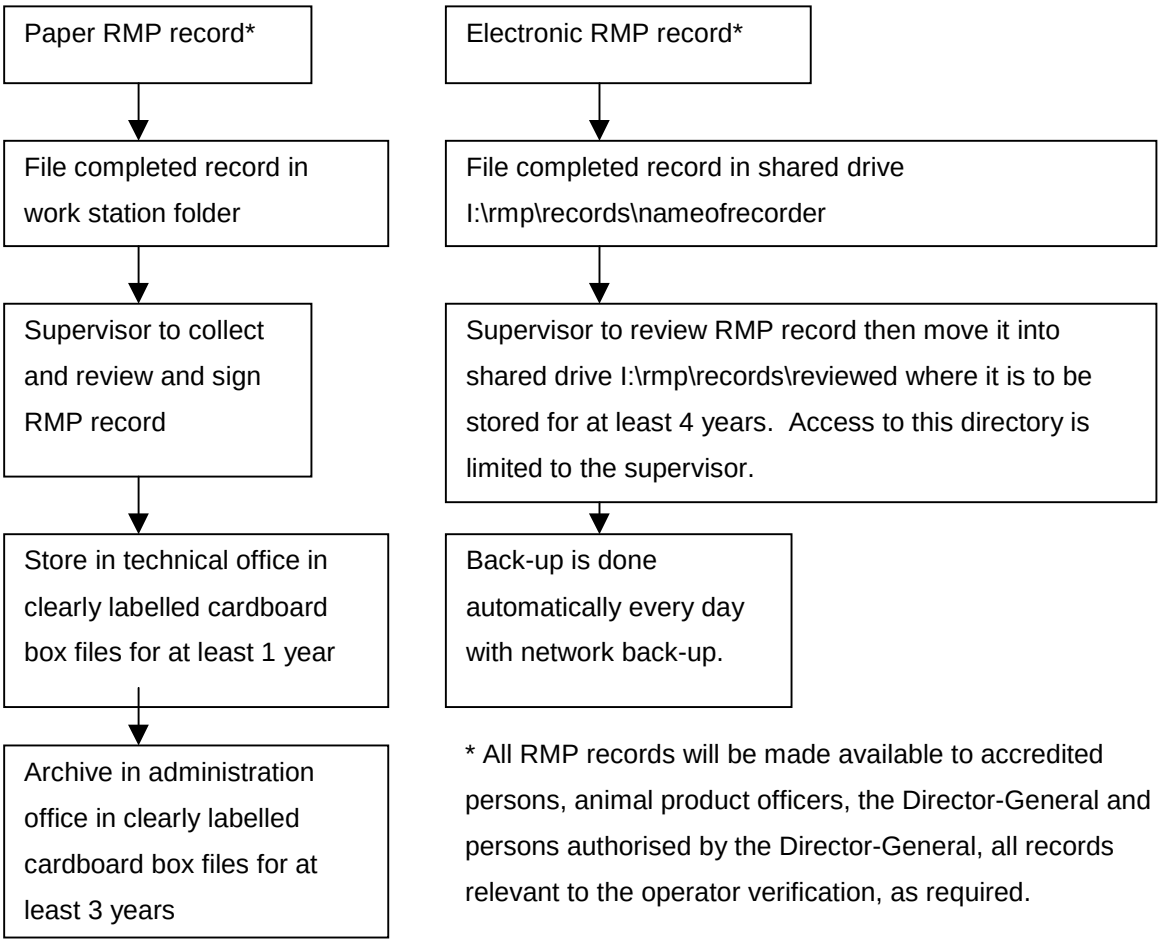
RMP Component	Document name	Version	Date	Specific References	Evaluator (Initials / date)
Management authorities and responsibilities	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.1	
Scope	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.2	
Product description and intended purpose	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.3	
Fitness for intended purpose (product outcomes)	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.4, 2.5, 2.6	
Process description	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.4, 2.5, 2.6	
Identification and analysis of hazards to human and animal health	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.4, 2.5, 2.6, 2.7, 2.8	
Control of hazards	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.4, 2.5, 2.6, 2.7, 2.8	
Identification and analysis of other risk factors (labelling and wholesomeness)	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.4, 2.5, 2.6	
Control of other risk factors	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.4, 2.5, 2.6	
Operational authorities and responsibilities	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.9	
Generic corrective action procedure	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.10	
Recall procedure	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.11	
Provision for verification activities and verifiers' rights	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.12	
Operator verification	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.13	
Documentation and record-keeping	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.14	
Systems required by legislation	Generic RMP - Slaughter and Dressing of Broilers	Draft 6	Dec 02	2.15	

Signed by……(Operator)
Operators name in full……(Print clearly)
Date……
Signed by……(Evaluator)
Evaluator's name in full……(Print clearly)
Date……

2.14.2 Record-keeping

The operator must have a procedure for ensuring that **all** records[81] necessary to demonstrate compliance with the RMP (not only those kept for monitoring, corrective action and verification), are protected and stored for four years. An example of such a procedure is given below.

Example CC: Record Control System



* All RMP records will be made available to accredited persons, animal product officers, the Director-General and persons authorised by the Director-General, all records relevant to the operator verification, as required.

The supervisor's review of any records relating to monitoring, corrective action and operator verification for the risk management programme, will check that they include -

- date and time of observation; and
- subject and description of observation; and
- any corrective action undertaken; and
- means to identify the observer and any person who undertook corrective action;
- any other information required under the RMP as applicable.

[81] The records listed in this generic RMP may be different to those used by the operator. If this is the case the operator should change the titles of the records referred to in all sections to those actually used.

2.15 SYSTEMS REQUIRED BY ANIMAL PRODUCTS REGULATIONS OR SPECIFICATIONS

In addition to documenting RMP components, the operator must also **document systems** where necessary to meet any relevant Animal Product Regulations or Specifications. This section summarises the relevant legal requirements at the time of issue of this document**. It is the operator's responsibility to keep up to date with any changes to legislation.** For further information, refer to the NZFSA web site: www.nzfsa.govt.nz/animalproducts/legislation/. The systems already developed for the RMP components may be sufficient to meet some of the requirements. Where this is not the case, the operator must document extra systems in their RMP.

2.15.1 Animal Products Regulations 2000

5. Animal material to be suitable for processing into animal product
6. Animal product to be free of certain hazards, objects, materials, and substances
7. Composition of animal material or product
8. Animal product not to be associated with false or misleading representation
9. Animal material and product to be processed in manner that minimises contamination and deterioration
10. Requirements for premises, places, facilities, equipment, and essential services
11. Hygiene of processing environment
12. Hygiene of persons whose presence or actions may result in contamination of animal material or animal product
13. Persons infected by or carriers of disease or illness to be excluded from working areas or from handling animal material or product
14. Required measuring equipment to be calibrated and function as intended
15. Animal material and product to be examined, sampled, and tested
16. Packaging requirements for animal material and product
17. Carriage and delivery requirements for animal material and product
18. Identification system requirements
19. Labelling and identification requirements
20. Record and return requirements
22. Requirements relating to animal material for primary processing
23. Requirements relating to suppliers of animal material for primary processing
26. Identification, differentiation, and security systems and devices

2.15.2 Animal Products (Ancillary and Transitional Provisions) Regulations 2000

10. Matters that must be addressed by risk management programmes
15. Maximum permissible residue limits

2.15.3 Animal Products (Amendments to Incorporated Material) Notices

2002, Notice (No.1237)
2001, Notice (No.1189)
2001, Notice (No.1208)

2.15.4 Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002

5. Design and construction
6. Facilities and equipment etc
7. Lighting
8. Water coming into contact with animal material or animal product
9. Water not coming into contact with animal material or animal product
11. Requirement for reticulation management plan
12. Requirement for water management plan
13. Water analyses
14. Non-complying water
15. Process gases
16. Compressed air
17. Additives, processing aids, vitamins, minerals, and other nutrients
19. Management of animal material or animal product not for human consumption
20. Waste management
21. Approved maintenance compounds to be labelled
23. Health
28 Calibration and measuring equipment suitability
30. Packaging
32. Labelling of transportation outers
32A. Identification of animal material or product in bulk transportation units
32B. Labelling changes
34. Documented programmes and Records
39. Supply of farmed animals

40. Supplier statements for farmed animals

41. Supply of farmed poultry

69A. Animal status declaration forms

70. Reception

71. Ante-mortem examination

72. Slaughter

73. Suspect animal material

74. Handling and processing

75. Post-mortem examination

76. Chilling and freezing

114. Processing environment for material and product from mammals and birds

115. Process inputs

116. Process control

144. Design and construction

145. Hygiene and maintenance

146. Operation

147. Records

Appendix A: Glossary of Terms.

Any term or expression that is defined in the Animal Products Act 1999, Animal Products (Ancillary and Transitional Provisions) Act 1999, or regulations made under those Acts and used, but not defined here, has the same meaning as in those Acts or regulations.

Accredited evaluator: a person accredited by the Director-General under section 103 of the Animal Products Act 1999 to perform evaluation functions and activities.

Accredited person: in relation to any verification or other specialised function or activity, means a person accredited by the Director-General to perform that function or activity.

Accredited verifier: or accredited risk management programme verifier means a person currently accredited by the Director-General as a risk management programme verifier.

Act: the Animal Products Act 1999 unless otherwise stated.

Amendment: any change or event or other matter that means that the programme;

- Is no longer appropriate, or will no longer be appropriate to the animal material or product, processes or premises or place covered by the programme:
- Otherwise impacts, or will impact, on the fitness for intended purpose of the animal product concerned or the content of the risk management programme.

Animal: any member of the animal kingdom, and includes,-

- Any mammal, bird, finfish, shellfish, reptile, amphibian, insect or invertebrate:
- Any other creature or entity that is declared by the Minister by notice in the *Gazette* to be an animal for the purposes of this Act;
- but does not include a human being.

Animal Products Act regime: the regime under the Animal Products Act 1999, including the Apiaries Act Regime, the Meat Act Regime and that part of the Food Act Regime that interfaces with the Animal Products Act 1999.

Animal material: any live or dead animal, or any tissue or other material taken or derived from an animal.

Animal product business: a business undertaking that, for reward or for the purposes of trade,-

- Produces or processes animal material or product; or

- Exports animal material or product.
  (See existing business, new business)

Animal product officer, or officer: a person appointed as an animal product officer under the Animal Products Act and includes the Director-General.

Animal product standard, or standard: a standard prescribed by regulations and specifications that specifies the criteria that must be met to determine fitness for intended purpose of any class or description of animal product.

Animal product, or product: any animal material that has been processed (other than simply transported or stored in such a way as not to involve any alteration to its nature) for the purpose, or ultimate purpose, of consumption or other use by humans or animals.

Audit: a systematic and independent examination to determine whether activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.

Business: (See animal product business, new business or existing business).

Consumption: (See human or animal consumption).

Contaminant: any substance or thing which,-

- Is undesirable, potentially harmful, or unexpected in a particular product or process; and
- Is or may be present in, or in contact with, animal material or animal product.

Control (verb): To take all necessary actions to ensure and maintain compliance with criteria established in the HACCP plan.

Control (noun): The state wherein correct procedures are being followed and criteria are being met.

Control measure: Any action and activity that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Corrective action: Any action to be taken when the results of monitoring at the Critical Control Point indicate a loss of control.

Critical control point: a step at which control can be applied that is essential to prevent or eliminate a risk factor or reduce it to an acceptable level, as described in section 17(3)(b) of the Act.

Critical limit: a criterion which separates acceptability from unacceptability, and includes acceptable parameters as described in section 17(3)(c) of the Act.

Director-General: the chief executive of the Ministry.

Eaten, or edible: includes eaten or edible by animals.

Edible offal: means offal that may be eaten by humans, traditionally gizzards, hearts and liver but also more recently feet and necks.

Evaluation: the process of independent external assessment of the validity of a risk management programme for the purposes of providing an independent evaluation report as required under section 20(2)(b) of the Animal Products Act.

Evaluator: a person accredited under the Animal Products Act who is deemed competent to evaluate a risk management programme and prepare a report on the findings.

Existing business or existing animal product business: a business that, as at the commencement of Part 2 of the Animal Products Act 1999, was operating as an animal product business, but does not include any business or operation referred to in paragraphs (a) to (c),-

- A business that first becomes a dual operator butcher after the date of commencement of Part 2 of the Animal Products Act 1999 by reason of first becoming a retail butcher or a person who provides services in relation to homekill or recreational catch after that date:
- Any new operations that are added, on or after the date of commencement of Part 2 of the Animal Products Act 1999, to a business covered by an existing licence or licences under the Meat Act 1981 to the extent that the operations are not covered by the existing licence or licences (or a licence granted after the commencement of Part 2 of the Animal Products Act 1999 in certain limited circumstances):
- Any new primary processing operations that are added, on or after the date of commencement of Part 2 of the Animal Products Act 1999, to any business, whether or not subject to the Food Act regime, to the extent that the operations are not covered by an appropriate licence under the Meat Act 1981.

Exporter: a person who exports any animal material or product from New Zealand that is included in the coverage of the Animal Products Act 1999.

External verification: means the process of verification by an accredited verifier.

Fit for intended purpose: the phrase, used in relation to any animal product, that has been processed in accordance with the requirements of a registered risk management programme under

the Animal Products Act 1999, means that by reason of animal material or product having had the relevant risk factors managed and meeting any relevant animal product standards and associated specifications, the product is suitable for the purpose for which the product is specifically stated or could reasonably be presumed to be intended having regard to its nature, packaging, and identification.

Food Act regime: the alternative regimes under the Food Act 1981 that consist of, or relate to,-

- Part IA of that Act and food safety programmes:
- The Food Hygiene Regulations 1974.

Food Safety Objective (FSO): A description of the expectations of hygiene measures that are applied during a particular segment of a food production process. These objectives should include measurable outcomes expected for the final product and may have a qualitative or quantitative association with the level of risk to the consumer.

Food safety programme: a documented programme designed to identify and control food safety risk factors in order to establish and maintain food safety. A food safety programme within the meaning of the Food Act 1981 is a programme whose adoption gives rise to an exemption from the Food Hygiene Regulations 1974 under Part 1A of that Act.

Generic corrective action procedure: a documented procedure as required under clause 8(2) of the Animal Products (Risk Management Programme Specifications) Notice 2000.

Good Hygienic Practice (GHP): Hygienic measures and activities acceptable to the industry and regulatory agency , that are routinely achieved.

Good Manufacturing Practice (GMP): Assurance that product is consistently produced and controlled to quality standards appropriate to their intended use and as required by the regulatory authority and industry.

HACCP: A system which identifies, evaluates and controls hazards that are significant for food safety.

HACCP audit: A systematic and independent examination of an applied HACCP plan to determine whether activities and related results comply with planned arrangements, and whether these arrangements are implemented effectively and are achieving set objectives on an ongoing basis.

HACCP coordinator: An appropriately trained person responsible for coordinating the application and implementation of HACCP at a premises.

HACCP plan: A document prepared in accordance with the principles of HACCP to ensure control of hazards which are significant for food safety in the segment of the food chain under consideration.

HACCP plan summary spreadsheet: A summary of the application of the seven HACCP principles to the selected product and process.

Hazard: a biological, chemical, or physical agent that,-

- Is in or has the potential to be in animal material or product, or is or has the potential to be a condition of animal material or product; and
- Leads or could lead to an adverse health effect on humans or animals.

Hazard analysis: The process of collecting and evaluating information on hazards and conditions leading to their presence to decide which are significant for food safety and therefore should be addressed in the HACCP plan.

Human or animal consumption: used in relation to any animal product, means that the product is intended to be eaten, or taken orally, or administered parenterally, or applied topically.

Inedible offal: means offal that is not suitable for human consumption and is used in petfood or sent for rendering.

Input: any animal material, animal product, additive, processing aid, ingredient, packaging or other associated thing that is contained within, attached to, enclosed with, or in contact with, the animal material or animal product.

In writing: printed, typewritten, or otherwise visibly represented, copied, or reproduced, including by fax or email or other electronic means.

Meat Act regime: the provision of the Meat Act 1981 (as amended by Part 4 of the Animal Products (Transitional and Ancillary Provisions) Act 1999) and includes all regulations and other requirements made or imposed under that Act.

Minister: the Minister of the Crown who, under the authority of any warrant or with the authority of the Prime Minister, is for the time being responsible for the administration of the Animal Products Act.

Ministry: The Ministry of Agriculture and Forestry or such other Ministry as has, with the authority of the Prime Minister, for the time being assumed responsibility for the administration of the Animal Products Act.

Monitor: The act of conducting a planned sequence of observations or measurements of control parameters to assess whether a CCP is under control.

New business, or new animal product business: a business that first commences operations as an animal product business on or after the date of commencement of Part 2 of the Animal Products Act 1999, and includes,-

- A business that first becomes a dual operator butcher after the date of commencement of Part 2 of the Animal Products Act 1999 by reason of first becoming a retail butcher or a person who provides services in relation to homekill or recreational catch after that date:
- Any new operations that are added, on or after the date of commencement of Part 2 of the Animal Products Act 1999, to a business covered by an existing licence or licences under the Meat Act 1981to the extent that the operations are not covered by the existing licence or licences (or a licence granted after the commencement of Part 2 of the Animal Products Act 1999 in certain limited circumstances):
- Any new primary processing operations that are added, on or after the date of commencement of Part 2 of the Animal Products Act 1999, to any business, whether or not subject to the Food Act regime, to the extent that the operations are not covered by an appropriate licence under the Meat Act 1981.

Official assessor: a person appointed by the Director General who carries out such routine examinations of animal material and products as may be required for the purposes of the Animal Products Act 1999, and particularly for the purpose of enabling official assurances to be given under the Animal Products Act.

Official assurance: a general statement to a foreign government, or its agent of a foreign government, attesting that, as appropriate one or more of the following applies in respect of any animal material or product:

- Any specified process has been completed under the Act with respect of the animal material or product concerned:
- The animal product concerned meets the animal product standards set under the Act for that animal product:
- Any market access requirements of the importing country, which New Zealand has agreed to meet, that are stated in the assurance have been met by the system under which the animal material or product was produced or processed:
- The situation in New Zealand, in relation to any matter concerning animal material or animal product is as stated in the assurance.

Operator: in relation to an animal product business, means the owner or other person in control of the business.

Operator verification: means the application of methods, procedures, tests and other checks by the operator to –

- validate the risk management programme; and
- determine the ongoing compliance and applicability of the risk management programme; and
- re-validate the risk management programme when changes occur that may have a significant impact on the outcomes of animal material or animal product, -

and corresponds with **confirmation** as described in section 17(3)(f) of the Animal Products Act.

Outcome: means the expected level of control of a risk factor relating to animal material or animal product resulting from implementation of the risk management programme.

Output: means animal material or animal product resulting from operations under a risk management programme.

Overseas Market Access Requirements: access requirements for overseas markets which New Zealand has agreed to meet, as interpreted and notified by the Director General. These are requirements which must be met by operators of registered risk management programmes or exporters when exporting material or product to those markets covered by the access requirements.

Parenterally: administering a substance to a human or animal by a route other than orally or topically.

Pet food: means animal foods intended for any domestic cat or dog [and includes zoo carnivores, farmed carnivores (e.g. the mustelidea) and may include aquatic animals.] **(IS 7)**
In the context of this plan it means offal that may be used for this purpose that has not been "rendered", it may be fed raw to animals, or may be blended with other ingredients and cooked or retorted to make a commercial petfood. All offal, unless from birds subject to "special process" (see Whole Flock Health Scheme), is deemed to be Minimal Risk (**IS 7**).

Place or premises: includes any building, conveyance, craft, fishing vessel, or structure; and includes any land, water, or other area where animals or animal material are produced or may be present.

Prerequisite programme: a documented programme covering GMP-based food hygiene activities that may interact at a number of process steps within and across various processes in a food premises, and that have the potential to influence the hygiene status of the product.

Primary processor: a person who, for reward (otherwise than as an employee) or for purposes of trade,-

- Slaughters and dresses mammals or birds; or
- Dresses mammals or birds that were killed as wild animals; or

- Removes or extracts or harvests any animal material from live animals for the purpose of processing for human or animal consumption; or
- In the case of finfish or shellfish or any animal other than a mammal or bird, or in the case of a mammal or bird where in the opinion of the Minister it is appropriate that the primary processing of that mammal or bird should extend beyond the matters referred to in paragraphs (a) and (b), processes those animals to the extent specified by the Minister by notice in the Gazette.

Primary producer, or producer: a farmer, and includes,-

- Any person who (otherwise than as an employee) farms, raises, grows, or keeps animals for reward or for the purposes of trade in those animals or in animal material or products derived or taken from those animals; and
- Any person who hunts animals for reward or for purposes of trade.

Process: includes kill, slaughter, dress, cut, extract, manufacture, pack, preserve, transport, and store.

Processor: a primary processor or secondary processor.

Readily accessible: means that no matter where documents are stored, they can be mailed, couriered, faxed, emailed or transferred by other means within the time period stated.

Recognised agency: in relation to any function or activity, means a person or body recognised by the Director General for the purpose of performing that function or activity. This will include the management and supply of accredited persons to perform specialist functions and activities for the purposes of the Animal Products Act, including evaluation and verification functions and activities.

Registered exporter: an exporter currently registered by the Director General as eligible to export animal material and products. Where a registered exporter is based overseas, this includes the New Zealand Agent or representative of that exporter.

Registered risk management programme: a risk management programme that is currently registered by the Director General under the Animal Products Act (See risk management programme).

Regulated animal product: animal material or product for trade or export that is processed or has been or is required to be processed, according to the requirements of a risk management programme and/or regulated control schemes (or of the Food Act Regime); and does not include any homekill or recreational catch product.

Rendered: means product that has undergone a grinding, cooking and drying process to produce a meal. Condemned product and most of the viscera are disposed of through rendering and the meal is used in animal feed formulations for non-avian species. Feathers are hydrolised and rendered.

Revalidation of a HACCP plan: Re-verification that a HACCP plan is complete and will deliver the expected food safety outcomes after changes (modifications) have taken place to the product specifications or the process.

Risk: A function of the likelihood and severity of an adverse health effect on the consumer as a result of exposure to a hazard.

Risk factors:

- Risks from hazards to animal or human health:
- Risks from false or misleading labelling:
- Risks to the wholesomeness of animal material or product.

Risk management programme: is a programme designed to both identify and control, manage, and eliminate or minimise hazards and other risk factors in relation to the production and processing of animal material and animal products, in order to ensure that the resulting animal product is fit for intended purpose. A risk management programme established under the Animal Products Act, 1999 may also encompass as a component, part of the food safety programmes (or part thereof) established under the Food Act Regime.

Secondary processor: a person who, for reward (otherwise than as an employee) or for purposes of trade, processes animal product at any stage beyond its primary processing.

Step: A point, procedure, operation or stage in the food chain, including raw materials, from primary production to final consumption.

Topically: applying a substance externally to a part of the body of a human or animal.

Trade: sell for human or animal consumption or use; and includes,-

- Selling for resale (including as a constituent part of another article) for human or animal consumption or use; and
- Offering or attempting to sell, or receiving for sale, or having in possession or exposing for sale, or sending or delivering for sale, or causing or permitting to be sold, offered, or exposed for sale; and
- Barter; and
- Supplying an article under a contract, together with other goods or services or both, in consideration of an inclusive charge for the article and the other goods or services; and

- Supplying an article where there is a statutory responsibility to supply; and
- Offering as a public prize or reward, or giving away for the purpose of advertisement or in the furtherance of any trade or business; and
- Every other method of disposition for valuable consideration.

Uncontrolled hazard: a hazard which has been identified in a hazard analysis and for which the operator has no control measures available, and the operator is not required to control that hazard.

Validate: in relation to a risk management programme means the process by which the operator ensures that the programme is complete, and meets the requirements of the Act and any relevant animal product regulations and specifications; and when implemented, will consistently achieve the required outcomes of the programme; and **re-validate** has a corresponding meaning.

Verification: includes the ongoing checks carried out by accredited verifiers to determine whether,-

- Operations that are subject to a risk management programme or a regulated control scheme are in compliance with the requirements of the programme or of the Animal Products Act:
- Animal material or products for whose export an official assurance is required have been produced or processed in a way that meets the requirements for the official assurance.

Whole Flock Health Scheme: a documented effective system of health surveillance and, where applicable, disease control or eradication. Includes nutritional diseases and the management of agricultural chemicals and animal remedies. (PIPS 5, 1.2)

Wholesomeness: in relation to any regulated animal product, means that the product does not contain or have attached to it, enclosed with it, or in contact with it anything that is offensive, or whose presence would be unexpected or unusual in product of that description.

Appendix B: Abbreviations.

CCP: Critical Control Point.

CL: Critical Limit.

COP: Code of Practice.

EPM: Extraneous Poultry Matter, poultry matter that should not be there at that point in the process, eg. skin on skinless product.

FSO: Food Safety Objective.

GHP: Good Hygienic Practice.

GIT: Gastro-intestinal tract.

GMP: Good Manufacturing Practice.

HACCP: Hazard Analysis and Critical Control Point.

ISO: International Organisation for Standardisation.

MAF: Ministry of Agriculture and Forestry.

MAF VA: Ministry of Agriculture and Forestry Verification Agency.

MISC: Meat Industry Standards Council.

NZFSA: New Zealand Food Safety Authority.

NZQA: New Zealand Qualifications Authority.

OMARS: Overseas Market Access Requirements.

PIPS5: Poultry Industry Processing Standard 5.

PISC: Poultry Industry Standards Council.

Appendix C: Whole Flock Health Scheme.

Scope

Includes the process from receipt of day old birds on farm, control of the environment to minimise the risk of microbiological and chemical contamination of the birds and presentation of the chicken broilers to the processing plant for slaughter. This includes:

- chemical residue monitoring programme,
- specifications for transport and handling,
- feed withdrawal periods,
- supplier declarations.

Identify and Analyse Hazards and Other Risk Factors

Hazards	Risks to Wholesomeness
B: Enteric pathogens e.g. *Salmonella* species, *Campylobacter jejuni* C: Chemical Residues from animal remedies	W: Runts W: Broken bones, excessive bruising W: Skin Lesions W: Abnormal offal

Requirements

Mandatory Requirements
1. Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002, Clauses 40 and 41
2. Agricultural Compounds and Veterinary Medicines Act – only licensed animal remedies can be used

Operator Defined Requirements
3. Only feeds approved by, or manufactured by the Operator may be used.
4. Only medications or animal remedies approved by, or supplied by the Operator may be used, their use must be recorded and any withdrawal periods followed.
5. Staff and contractors visiting on a regular basis must be trained in, and must follow, Biosecurity procedures. A visit record must be kept.
6. Biosecurity procedures must be documented and implemented with records completed timeously.
7. The grower must inform the Operator of any event, condition, disease or unusual behaviour that may result in the birds being unfit for processing.
8. The grower must follow the residue management procedures on farm by having a system for the separation and identification of feeds and a record of feed changeovers.
9. The grower must keep the required records and provide the Operator with a Supplier Declaration before the first harvest.
10. All runts, sick or moribund birds must be culled and removed from the shed.
11. Dead birds must be removed from the shed timeously and disposed of in a manner that does not increase the risk to the flock.
12. Feed shall be withdrawn from birds approximately 8 hours before processing.
13. Transport of birds to the processing plant must be carried out in a manner and by an organisation approved by the Operator.
14. Ante mortem examinations are required during catching, in lairage and during hanging.

Definitions

+ve	Abbreviation for positive, usually used to refer to flocks with positive Salmonella results.
Am/pm	Ante-mortem and post-mortem inspection.
Apparently Healthy/ Healthy	Refers to a bird that does not show evidence of disease or defect which might affect its suitability for human consumption as judged by a competent person.
Batch	The consecutive number given to broiler placements. All on farm records are traceable to this batch number.
Biosecurity	A set of documented procedures designed to minimise the risk of the birds becoming exposed to avian or human pathogens.
Broiler SOP	The standard operating procedure (and records) required by all Broiler farms (per batch).
Catching	The act of catching poultry and placing in transport containers for transport to processing premises.
Competent Person	A person with a specific level of skill, knowledge and understanding to enable decisions to be made on the acceptability of birds, or carcasses as defined in the regulations (Accept / Reject criteria only). This is the person with overall competency for am/pm purposes.
Culls	Birds that are small (25% smaller than average) and may have difficulty reaching food & water or birds that show signs of illness. These birds are killed in a humane manner and removed.
Cut	More than 1 harvest may be taken from a shed, eg 1st cut refers to the first time birds are removed from the shed for transport to processing.
DOA	Birds that are Dead On Arrival.
Endemic Disease	Disease which is found in the poultry flock within New Zealand.
Exotic Disease	A disease of animals which: • is not recognised by the Chief Veterinary Officer as occurring in New Zealand; • the Chief Veterinary Officer believes is capable or potentially capable of causing unwanted harm to any natural and physical resources; • the Chief Veterinary Officer believes could potentially have an economically significant impact on the viability of animal production or market access. Exotic disease includes any new and emerging diseases which are not recognised by the Chief Veterinary Officer as previously occurring in New Zealand, regardless of their origins.
Final Weighing	The weighing of a given number of birds prior to slaughter that gives approximations of weight at slaughter for process planning.
Livestock Advisor	A person who may, or may not, be a company employee who is competent (either by qualification or experience) to advise the grower on livestock issues (see 6.8).
Mortalities	Birds that are found dead by the grower during routine visits to the shed.
PIPS 5	Poultry Industry Processing Standards 5 – Specification for slaughter and dressing of poultry in New Zealand.
POR	Person with Overall Responsibility, as defined by the ante-mortem/post-mortem regs, a person with the competency and authority to decide whether a flock should be processed or not, also to decide whether special conditions are required and to ensure that they are followed.
QC	Quality control or process control checks used to measure whether a system is in control.
Supplier Declaration	A statement from the grower (supplier) to the processor that each run of birds is suitable for slaughter for human consumption. Some companies have their own documentation but the minimum standard is in 6.11. The supplier declaration will include any data required for the ant-mortem/post-mortem regulations.
Whole Flock Health Scheme	A documented system of health surveillance and, where applicable, disease control or eradication (including nutritional diseases).

Flowchart

Inputs	Process Flow	Outputs
Day old chicks	1. Day old chicks * delivered to the broiler farm	
Fresh litter (untanalised)		
Feed ➔	2. Brooding (Growing of young flock 0 - 7 days)	➔ Culls
Water ➔		➔ Mortalities
Feed ➔	3. Growing until slaughter (there may be more than one cut from the	➔ Culls
Water ➔	sheds)	➔ Mortalities
Clean crates ➔	4. Catching (Birds caught and loaded into crates for transfer to the	➔ Culls
Trucks ➔	processing plant.)	➔ Mortalities
		➔ Used litter
	5. Reception (Birds are received and are subject to ante-mortem	➔ Culls
	inspection)	➔ Mortalities
	6. Slaughter	➔ Dirty crates
	7. On line QC including post mortem inspection	➔ Edible birds & offal
		➔ Petfood
		➔ Product to be rendered

***NB. Day old chicks must be transported and handled in accordance with Animal Welfare Code 15 Section 16**

Inputs and outputs

Description of Each Input	Description of Each Output
Day Old Chicks - broiler chickens to be obtained from a supplier that has controls in place for Salmonella. Fresh Litter - may be untanalised wood shavings, boric acid treated wood shavings, paper, chopped straw or other suitable media that does not cause residues. Feed - compound feed from a mixture of protein sources blended with tallow and micronutrients. Water - must be potable, free of known or visible contaminants and chlorinated to give a minimum of 2ppm FAC[82] (free available chlorine) at point of use, or must be sanitised in some other way. Clean crates - crates that have been washed and sanitised prior to use to minimise the risk of contaminating the farm. Medication as appropriate prescribed by a vet, or certified animal remedy. (Must be recorded on supplier declaration and any withdrawal recommendations followed).	Culls/Mortalities - dead birds removed off site or buried **or other appropriate disposal mechanism.** Used Litter - litter taken from the sheds and used as manure or other appropriate uses. Dirty crates - crates that need washing & sanitising before re-use**.** Edible Birds & Offal - products suitable for human consumption. Pet food - raw product unsuitable for, or not required for human consumption but suitable for pet food or for processing into pet food. Product to be rendered - Product not suited for, or not required for, human consumption or pet food is transported to rendering plants to be converted into protein meals and tallow.

[82] This may be difficult to achieve if the water has a high iron content, records must indicate that sufficient sanitiser has been used to control bacterial pathogens in the water, or another method has been employed to achieve the outcome of control of pathogens in the water supply. When the birds are young water uptake is inevitably small and it may not be possible to achieve this level at the point of use, once the birds are over 20 days old this level should be achieved.

Sources of Hazards / Risks to Wholesomeness

Sources	Hazards / Risk Factors	Control measures
Day old chicks	B: Enteric Pathogens, e.g. *Salmonella*.	Microbiological monitoring at the hatchery for *E. coli* and Salmonella.
Chicks during growout period	B: Enteric Pathogens, e.g. *Salmonella*.	The Grower will inspect the flocks with a complete walkthrough at least once daily with a minimum of four other inspections. During the inspection the grower will cull sick, moribund or runted birds and remove any dead birds from the shed, Any unusual signs or symptoms will be reported to the Processor. A Livestock Advisor will visit the flock during the run to check the health status of the birds and discuss any issues with the Grower. All practical steps will be taken to ensure that the Biosecurity procedures are effective. Birds will be evaluated during catching and hanging, sick, runted or moribund birds will be culled and not used for human consumption. Daily record of culls and birds found dead. Disposal method for dead birds and culls.
	C: Chemical Residues from animal remedies.	Only approved animal remedies used on birds. Use has been in accordance with manufacturer's instructions and withdrawal periods have been observed.
	W: Runts	Appropriate feeding regimes. Separation of smaller birds from others until they catch up in size. Culling.
	W: Abnormal offal	Controls as for B: Enteric pathogens.
Drinking Water	B: Enteric Pathogens, e.g. *Salmonella*.	Water should be clean and chlorinated to give Free Available Chlorine (FAC) at the point of use and checked and recorded at least weekly. Drinking equipment is to be thoroughly cleaned in between runs.
Litter	C: Chemical residues from copper or other wood preservatives	Purchase from known suppliers who can provide assurance that litter has not been treated with preservatives.
	W: Skin Lesions	Replace litter in between runs to minimise build up of ammonia.
Feed	B: Enteric Pathogens, e.g. *Salmonella*.	Heat treatment at the feedmill. Addition of organic acid. If feed is not supplied by the Operator then it must be purchased from a source approved by the Operator.
	C: Chemical residues from animal remedies	Residue management system for feed. Records of changeover dates of feed types.

Sources	**Hazards / Risk Factors**	**Control measures**
Pests – rodents, insects and wild birds	B: Enteric Pathogens.	Pest control, including a location diagram for bait sites and records of takes, corrective action taken etc. Pest proofing of buildings. Removal of harborage such as unused equipment or long foliage. Waste management.
Pest control chemicals	C: Residues from pest control chemicals	Chemicals used must be approved for that use, and be used according to manufacturers instructions.
People	B: Enteric Pathogens, e.g. *Salmonella*. B: Pathogens from skin and nose, e.g. *Staphylococcus aureus*	Boot change. Hand washing/sanitising. Downtime after visiting other animal or poultry sites. Visitor controls. Training.
Animals	B: Enteric Pathogens, e.g. *Salmonella*.	Animals must not be permitted to graze within 2 meters of the shed and dogs & cats must be excluded from the site.
Catching	B: Enteric Pathogens, e.g. *Salmonella*.	Equipment cleaned and sanitised at the processing plant before entry to farm. If multiple cuts from sheds then process these birds last in day.
	W: Broken bones, excessive bruising	Dim lighting during catching to minimise bird movement. Careful handling of birds by catchers. Correct numbers of birds in crates.
Shed interior and equipment	B: Enteric Pathogens, e.g. *Salmonella*.	Cleanout procedures.
	C: Residues from cleaning, and fumigation chemicals	Chemicals used must be approved for that use, and be used according to manufacturers instructions.

Procedures

There shall be documented procedures for the above controls. They must include: details on the controls themselves, any limits that must be met, the monitoring to check that the controls are working, the corrective action to be taken when the limits are not met. These procedures should cover: what is done, when, who by, and if useful, where, how and why. They should also specify the records to be kept. An example of controls for live birds is shown below.

Control	Monitoring	Limits	Corrective Action[83]	Operator Verification	Records
Daily health status checks (mortality, culls) by Grower: One physical inspection of birds while walking through flocks as part of management practices. more visual checks per day (not requiring walk-through) are also required. As the Processor is reliant on the information obtained from the Grower it is the Grower's responsibility to ensure the information is accurate and meaningful. The Processor through the POR will specify the information required and when it should be submitted.	Record signs of ill health: Number of Deaths / Culls Any abnormal circumstances	Mortality /culls: During first 7 days up to 1% in total may be expected. After this initial period no more than 0.1% per day.	Grower notifies Livestock Advisor. Livestock Advisor may visit flock to view, or assess flock and will discuss actions with the Vet or POR, if required. All required actions are conveyed to the Grower. The Grower is responsible carriying out these actions. In all cases where the flock is treated or if the suitability of the flock for normal processing may be effected the Grower will inform the POR in writing, this information will also be included on the Supplier Declaration. After discussion, all communication is documented and filed with the Batch Record Sheet.	Livestock Advisor checks Daily Records at each visit	Daily Record Sheet Livestock Advisor's Visit Reports.

[83] Including: Restore Control, Product Disposition, Prevent recurrence.

Control	Monitoring	Limits	Corrective Action[83]	Operator Verification	Records
Health status is checked by the Livestock Advisor: Makes regular visits to each farm as part of the growing cycle – a number of checks are recorded – environmental, management of flock and flock health. All checks and advice are recorded. These checks can be replaced or supplemented by checks by competent individuals.	Visual checks on flocks once per run by Livestock Advisor.	Signs of ill health (to be defined by POR).	Livestock Advisor discusses actions with the Vet or POR if necessary. All required actions are conveyed to the Grower. The Grower is responsible for carrying out these actions. Grower must inform POR, in writing, of any situations that may effect the suitability of the flock for normal processing. All communication is documented and filed with the Batch Record Sheet.	Audit at least once per annum by POR.	Batch record sheet. Audit report.
	Salmonella swab on each shed once per batch by person trained to carry out this task. (Bird age 21 – 28 days).	Any positive swabs.	The Processor is notified to schedule positive flock for last kill of the day, wherever practicable, by exception with senior management Signoff. The farm status is positive and this may result in enhanced sanitising at clean out and any other appropriate measures.	Audit at least once per annum by POR.	Batch record sheet. Laboratory reports. Audit report.
	Diagnostic tests as required by Livestock Advisor or Vet.	Livestock Advisor or Vet. Makes decision based on results.	Grower takes action as required by the Livestock Advisor or Vet. Grower must inform POR, in writing, of any situations that may effect the suitability of the flock for normal processing.	Annual audit of records of advice given and recorded grower actions by POR.	Batch record sheet. Audit report.
Health status is checked by the Livestock Advisor	Post mortems when indicated by mortality, drop in weight gain, clinical signs.	No significant abnormalities.	Grower must inform POR, in writing, of any situations that may effect the suitability of the flock for normal processing.	Audit at least once per annum by POR.	Batch record sheet. Audit report

Control	Monitoring	Limits	Corrective Action[83]	Operator Verification	Records
Supplier Declaration is checked and signed. The grower must ensure that a completed and signed supplier declaration is with the Processor prior to the "first cut" from the shed.	Every supplier declaration must be checked by the processor prior to accepting the flock for slaughter.	All records complete, and farm on current company approved supplier list. All non-conforming data shall be reported to the POR & Supplier declaration completed and signed by the grower.	If farm is not on approved supplier list withhold from slaughter. Missing information is retrieved from responsible person and he/she is retrained.	Audit at least once per annum by POR.	Supplier declaration. Audit report.
		If details indicate flock fit for slaughter with special procedures the supplier declaration is completed and signed by the grower with an endorsement by the Vet or Livestock Advisor.	Livestock Advisor or Vet consulted and the flock with special circumstances is scheduled for slaughter following discussions with the POR.	Audit at least once per annum by POR	Supplier declaration. Catch record. Audit report.
		If details indicate flock not fit for slaughter the supplier declaration completed and signed by the grower. Vet to detail disposal instructions. POR to sign off.	Withhold from slaughter. Contact Vet for disposition. Vet. discusses actions with grower & POR. Contact MAF if required for Exotic Disease Response.	Audit at least once per annum by POR.	Supplier declaration. Catch record. Audit report.
Before sending the birds for slaughter, they are checked. As part of the catching process the birds are assessed against basic guidelines. This is an accept/reject criteria that rejects dead birds, moribund birds, sick birds and runts. NB. Birds must be caught and transported in accordance with the Animal Welfare Codes,	Each bird is assessed by catchers at catching,	Only live and apparently healthy birds are sent for slaughter,	The level of dead, unhealthy or moribund birds and runts is reported by the catchers. If the number in any category is abnormal then the grower and Processor's AM/PM person will be informed. All birds are humanely killed and disposed of as part of the farm's dead bird procedures.	Audit at least once per annum by POR.	Catch record. Audit report.

Control	Monitoring	Limits	Corrective Action[83]	Operator Verification	Records
Before accepting or hanging birds, they are checked. This is part of the plant QC check programme, birds must be apparently healthy, not overcrowded and not suffering from heat or cold stress.	Every delivery of birds is monitored during the reception and hanging procedure by the Processing QC checker.	All birds are treated humanely and only apparently healthy birds are slaughtered.	Ventilation or cooling sprays may be applied if birds are heat stressed. Catchers are retrained if birds are overcrowded. Staff are retrained if unhealthy birds are not identified or if birds are not treated humanely.	Examination of QC records by Technical officers. Audit at least once per annum by POR.	Primary Processing QC Sheets. QC summary. Audit report.
Before accepting or hanging birds, they are checked. This is part of the plant QC check programme, birds must be apparently healthy, not overcrowded and not suffering from heat or cold stress.	Number of DOA are recorded on Primary Processing QC Sheets.	<2kg < 0.17% >2kg< 0.19%	Unhealthy or rejected birds are humanely killed (in such a way as to minimise any contamination of product) and placed in inedible bins. DOA's are placed in inedible bins. If the reject/runt number is greater than standard, then the grower and Livestock Advisor are notified.	Examination of QC records by Technical officers. Audit at least once per annum by POR.	QC summary. Audit report.
	Unhealthy and rejected birds recorded on Primary Processing QC Sheets	<0.2%	Unhealthy or rejected birds are humanely killed (in such a way as to minimise any contamination of product) and placed in inedible bins. If the reject/runt number is greater than standard, then the grower and Livestock Advisor are notified.	Examination of QC records by Technical officers. Audit at least once per annum by POR.	Primary Processing QC Sheets. QC summary. Audit report.
The Livestock Advisor or the Vet oversees the disease status of the Flock	Livestock Advisor or Vet to routinely assess flock health by review of performance parameters, serology, micro reports and records.	When disease status warrants as determined by the Livestock advisor or vet.	Livestock Advisor or Vet to develop & communicate strategy to growers. Grower must inform POR, in writing, of any situations that may effect the suitability of the flock for normal processing.	Audit at least once per annum by POR.	E-mails & minutes of conference calls & meetings. Audit Report.

Health checks by Growers/ Advisors

Visual Checks	Details
1. Shed factors	• Feed consumption. • Water consumption. • Odour. • Condition of litter.

2. Mortality and Culls	• Flock to be inspected for mortality daily and any dead birds to be removed from the sheds. A sudden increase in mortality can be a sign of ill health in the flock. If the mortality figures are higher than those listed in page 6-4 control 1a, then the Livestock Advisor will be notified.
	• Sheds to be inspected for cull birds daily and culls killed humanely (neck dislocation or other allowed method) and removed from the shed.
	• Culls can be recognised as:
	  • Any deformed or damaged birds where the deformity or damage affects the ability of the bird to access or compete for feed and water, or that allows the bird to suffer more social stresses.
	  • Any bird that is severely underweight or undersize that will:
	  - affect the ability of the bird to access or compete for feed and water, or
	  - allows the bird to suffer more social stresses, or
	  - will result in a bird that is commercially unacceptable.
	A rule of thumb is a bird 25% under the average weight or size.

3. Blood, or yellow coloured droppings, may indicate disease	• Normal droppings should consist of a dark coloured central part (from rectum) and an off-white surrounding portion (from kidneys).
4. Cloaca	• Pasting of vent.
5. Any Blood viewed in the flock	• Generally related to trauma damage.
6. Feet	• Excessive swelling of joints. • Hock Burn.

Visual Checks	Details
	• Physical deformity, or malformation.
7. Flock movement.	• Flock is static and birds do not move away when approached, or move for a short distance only before dropping again to the ground. • Flock is not alert to presence and doesn't respond to whistles, or claps. • Huddling in corners.
8. Breathing	• Mouth open, gasping, tail bobbing, blue coloration of beak/legs. Clicking , wheezing, head shaking.
9. Central Nervous disorders	• Circling, lying on side, paralysis, spasms, or fits, inability to hold neck up.
10. Bird Stance	• Neck not extended, tail is down and ruffled feathers on back of neck.
11. Body	• Swelling of the abdomen. • Breast blisters. • Injury/scratching.
12. Eye	• Dull and flat eye. • Crusting/matting of material around eye, swelling, foaming.
13. Beak	• Cracking, or splitting, or abnormal growth. • Anything abnormal should be communicated to the Broiler Advisor.

All birds are to be treated humanely at all times.

Dealing with Problems	Skills required for Monitoring / Corrective Action
Dead birds shall be removed and be disposed of (burnt or buried).	The Grower is responsible for ensuring that this is done on a daily basis.
Moribund, unhealthy or runted birds will be culled.	The Grower, Livestock Advisor, Vet or POR can cull chickens.
If flocks are identified that require special processing conditions (e.g. last in the day, increased post-mortem inspection required, not for human consumption) then the processor must be notified and those conditions must be adhered to, or the products will not be fit for purpose and an alternative disposition must be found.	Monitoring by the grower will provide an early warning and investigation by a Livestock Advisor and/or Vet will confirm that the flock can be processed using "special procedures". Agreement by the POR is mandatory. The corrective action is dependent upon the hazard presented but a "competent person with overall responsibility" (POR) as defined under the poultry inspection standard for ante & post mortem will have the requisite skills.

Dealing with Problems	Skills required for Monitoring / Corrective Action
If flocks are identified as unfit for slaughter they must be treated (if that will render them fit for slaughter) or an alternative disposition found. eg Discovery of gross chemical contamination.	Monitoring by the grower will provide an early warning and investigation by a Livestock Advisor and a Vet will confirm that the flock cannot be processed. The decision on whether the flock can be treated or must be destroyed will be taken in consultation between the vet, the POR and the regulator.
If the inspections suggest that the chickens display symptoms of a notifiable or exotic disease, the grower should contact the Processor and the Ministry of Agriculture and Forestry's Outbreak Response Services (0800-809-966) as soon as possible.	MAF will determine the appropriate corrective action.

Health checks by Catchers

All birds are to be treated humanely at all times.

These checks occur in very low light conditions and are restricted to identifying dead runty and very weak birds.

Those birds identified that are alive will be humanely destroyed and all birds identified will be disposed of on farm.

Supplier Declaration

The minimum standard for the Supplier Declaration is the supplier statement found in the **Animal Products (Specifications for Products Intended for Human Consumption) Notice 2002 Schedule 5.2.**

Competency requirements

All livestock personnel and contractors are to be trained to the level of competency necessary for the position as shown below. The POR must ensure that all people involved in ante-mortem (including on farm) or post-mortem inspections are competent.

The POR must do an annual audit of training records and assess the competency of these people. If large numbers of people are involved then random sampling procedures can be used to select those that are audited.

Level	Checks	Competency
All	Animal welfare	Need for and understanding of the Welfare Codes.
	Compliance	Understanding of the appropriate sections of PIPS5.
Vet	Assessing disease information	1. Veterinary Degree – New Zealand registration. 2. The ability to diagnose and treat poultry diseases and awareness of impacts on human health. 3. To differentiate between endemic and exotic diseases. 4. Knowledge of current medications in use. 5. Knowledge of current Animal Welfare Codes and Practices.
Livestock Advisor	Visual health checks on flocks	1. Know what a healthy flock looks like. 2. Be able to identify common poultry diseases and be able to describe symptoms of any disease to a Vet. 3. Understanding of procedure to follow with suspect Exotic disease. 4. Recognition of culls and flock fit for processing. 5. Understanding of the use and need for the various medications used.
	Diagnostic sampling	Be able to follow the correct sampling procedure, or send whole bird for sampling at laboratory.
	Post mortems	1. Know how to go about a routine PM. 2. Visually know the difference between a healthy bird and diseased. 3. Have a basic knowledge of the disease process and anatomy.
Grower	Salmonella sampling	Know the correct sampling procedure.

Level	Checks	Competency
Grower	Signing off supplier declaration	1. Have a detailed knowledge of the residue programme. 2. Have a detailed knowledge of the WFHS. 3. Be able to confirm through the information submitted that the flock is suitable for slaughter.
	Biosecurity	Need for and details of biosecurity programme.
	Animal welfare	Need for and understanding of the Welfare Codes relating to their operation.
		Understanding of the need for and contents of the residue control and WFHS programmes.
	Daily visual checks	1. Know what a healthy flock looks like. 2. Know what the critical criteria are. Example: water and feed consumption. 3. Be able to recognise signs of common poultry diseases. 4. Recognition of culls and flock fit for processing. 5. Understanding of procedure to follow with suspect Exotic disease.
Catcher	Catching check	1. Be able to differentiate runts/morbid birds from live birds. 2. Need for and understanding of the Welfare Codes as it applies to catching and transport.
Primary Process. Staff	Hanging bay/storage checks	1. Need for and understanding of the Welfare Codes as it applies to transport and reception of live chickens. 2. Be able to differentiate between birds acceptable for slaughter and those that are not. 3. Understanding of the WFHS.
Technical Officer	Operator verification	1. Audit skills, understanding of audit process, audit trails and documentation. 2. Knowledge of the risk management programme.
Processor	Residue programme	Understanding of the need for and contents of the residue control programme.
POR	Ante-mortem & post-mortem specifications	Specifications not yet available.

Monitoring

All control systems and flock health will be monitored by the grower on a daily basis.

Corrective Action

The system will stipulate the corrective action to be taken when the monitoring finds problems with the controls. **If the problem could effect the suitability of the flock for processing the Operator must be informed timeously**. Corrective action may include fixing the physical controls, retraining staff, increasing the frequency of the monitoring or a review of the scheme following discussions with the Operator. It is expected that there will be an appropriate and escalating response to persistent issues.

Operator verification

Periodic checks on the birds and the farm by the livestock advisor or Vet. Annual audit of the farm by the Processor. Annual audit of the whole flock health scheme by POR.

Records

Growers shall keep the following records for a minimum period of four years:

- Residue Management system – dates of delivery of feed, any medications in feed, silos used, date of last feeding of each feed type.
- Records of any medications or animal remedies given to the flock (or individual birds) during the entire growing period.
- Records of feeding regimes (dates of changes in diet).
- Water tests for chlorine or other sanitiser.
- Any microbiological test results on water, the flock or the environment.
- Records of litter supply and any tests carried out on the litter.
- Pest control records – map of site with bait stations, date of checks & number of takes, chemicals used, corrective action taken (must include an appropriate and escalating response).
- Daily records of culls and dead birds.
- Training records for staff and frequent visitors.
- Biosecurity declaration for visitors & visitors book.
- Completed supplier declarations.
- Record of all chemicals used on site and their purpose (including during cleanout and intercrop).
- Records from visits by Vets or livestock advisors or competent persons.
- Records of culls and mortalities (the Operator must be informed if these are higher than standard).
- Records of blood tests or any other diagnostic records that would verify the health status of the flock.
- Records of Salmonella tests or other microbiological results performed on the flock.
- Any other records that would help establish and verify the health status of the flock.