Resource Manual

for the RMP template for dual operator butchers

1 Prelims

Amendment 1

March 2010

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Disclaimer

IMPORTANT DISCLAIMER

Every effort has been made to ensure the information in this report is accurate.

NZFSA does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.

Website

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

Promulgatory Statement

This manual has been issued as a guide to use of the Risk Management Programme Template for Dual Operator Butchers.

Tony Zohrab
Director (Market Access)
(acting pursuant to delegated authority)

Amendments

This manual shall be reviewed as necessary by the New Zealand Food Safety Authority. Suggestions for alterations, deletions or additions to this manual, should be sent, together with reasons for the change, any relevant data and contact details for the person making the suggestion, to:

Sharon Wagener
Senior Manager (Production and Processing)
New Zealand Food Safety Authority
PO Box 2835
Wellington
Phone: (04) 894 2500
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Amendment Record

It is important that this publication is kept up-to-date by the prompt incorporation of amendments.

To update this publication when you receive an amendment, remove the appropriate outdated pages, destroy them, and replace them with the pages from the new issue. Complete instructions will be given on the covering letter accompanying the amendment. File the covering letter at the back of the publication and sign off and date this page.

If you have any queries, please ask your local verifier.

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2 Guidelines for Completing RMP Template

Amendment 2

June 2010

2.1 General instructions

The RMP template must be completed by a person or people with full knowledge of the operations covered by the RMP.

Read this guideline before completing each part of the template. You can either write on a hard copy of the template, or you can get the electronic file off the NZFSA web site and make the changes to the file then print it off. See http://www.nzfsa.govt.nz/animalproducts/publications/index.htm.

The RMP template has been pre-written as much as possible, but there are areas that need to be completed by the butcher to ensure that it accurately reflects their operation. **Where there are empty lines, tick-boxes or tables the butcher is expected to fill these out. Where a box is pre-ticked, it is expected that a butcher will comply with that statement.** If a statement is **not relevant** to a butcher's operation the butcher should **cross it out**.

NB: Do not write anything into any shaded boxes.

Ensure that all information that you have provided is easy to read. Check that the completed template accurately reflects your operation and that you will be able to comply with it.

2.2 NZFSA cover page

Do not write on this or use it. It is only there to show who has issued the template.

2.3 Title page

2.3.1 Section 1: Business Identification

Business ID: Enter your unique business identifier.

If you are already listed as a Dual Operator Butcher then use the identifier you got then. This should be on the card and the letter that you were sent when NZFSA listed you. If you can't remember what it is leave this blank and NZFSA will fill it in for you.

If you are not yet listed choose your own identifier which must be a number or number/letter combination of at least 3 and not more than 10 characters with at least one character as a number and no leading zeros. The business identifier must not be the same as any exporter's registration number and must not be already allocated to someone else. NZFSA will check this for you.

RMP No.: 01 has been entered for you as we have assumed this is your first RMP. If not, cross out the 01 and NZFSA will enter the correct number for you.

2.3.2 Section 2: Operator Name, Business Address and Contact Details

Legal entity: Tick one of the 3 boxes: Company, sole trader or partnership.

Details: If the business is a company, then enter the full legal name (which must match the details given at the Companies Office exactly).

If the business is a sole trader or a partnership then enter the name(s) of the business owner(s).

Trading Name: Enter the name that you trade under, i.e. the name that you use on your shop sign or letterhead, which may be different to the legal name given above.

Physical address: Give the street address of the premises covered by the RMP.

Postal address: Give the address where you want any mail sent to.

Phone / Fax: Give the other contact numbers for the business.

Email: List your email address if you have one, and tick the space provided if you agree to correspondence about your RMP being sent to you by email. This is recommended, whenever possible, as it speeds up communication from the NZFSA significantly.

Day-to-day manager This is the person responsible for the implementation of the RMP and for ensuring that it is kept up to date. He/she is the contact person for the NZFSA when dealing with matters related to the RMP.

Give the name, position or designation, and contact details (phone no., fax no., email address) of the day-to-day manager. This may be the same person as the operator or may be a different person.

2.3.3 Section 3: Training and Experience of Responsible Person(s)

A key aspect in food processing activities is the presence of good operating practice. Butchers are likely to already have practical knowledge and experience, e.g. through apprenticeships and years in the trade. In addition, they need to understand food hygiene and food safety and how to put this into practice correctly.

All dual operator butchers are required to have at least one person with basic food safety training and one with advanced food safety training by the due dates shown in the template. This person could be the butcher or an employee. Each person will need to have achieved or attended at least one of the listed items at each level to meet this requirement. It is desirable to have more than one person with this knowledge, where possible, to cover for absences and holidays. If you are not sure whether a course that you have attended meets the requirements, write in the name of the course and attach any details that you have about the course content and the training organisation so that NZFSA can consider approving this.

2.4 Table of contents

2.4.1 Section 4: RMP Document List, Responsibilities For and Authorisation of RMP

You must **complete this section last** after completing the other sections and attachments. Come back to this section then.

Column 1: This gives the list of all the documents, including the supporting systems process control and records that form part of your RMP. Make sure that the list agrees with the documents that you have including any extra documents you have added (e.g. your own procedures or records).

Column 2: Ensure that the page number, attachment letter (e.g. A, B) or record number agrees with that on the on the top right corner of each page of the relevant document in the RMP.

Column 3: List the date that is at the top of the document referred to. Make sure that all pages of each document have the same date.

Column 4: Even though the butcher is ultimately responsible for the operation, it is likely that the workload will be spread over a number of people (especially in larger butcheries). For each document, except those where the box is shaded, give the position of the person responsible for maintaining and implementing the procedures (e.g. Butcher, Manager, Supervisor, Contractor). For small operations, the same person may be responsible for all or for most of the systems. In this case you could enter the person once and use an arrow or ditto marks to show that it is the same person for other rows.

Confirmation: Get the operator or day-to-day manager of the RMP to check that they comply with the 4 pre-ticked statements.

Signature: The operator or the day-to-day manager of the RMP must sign and date the contents page once the template is completed. This authorises all of the listed documents and shows agreement to comply with them.

2.5 Other sections of main RMP

2.5.1 Section 5: Physical Boundaries – Site Plan

You must attach a site plan to the RMP or alternatively draw a plan here. The site plan must show:

- The land that the premises is on.
- The butchery buildings with relevant areas shown:
    a. retail area,
    b. meat reception areas (regulated and homekill),
    c. processing areas (raw products and ready-to-eat products),

d. chillers and freezers,

e. storage areas (for ingredients, packaging, cleaning chemicals, by-products and waste),

f. smoko rooms, toilets,

- Other buildings on the same land (even if not owned by you).
- Water treatment (e.g. chlorination, UV or filtration units, or storage facilities (e.g. tanks).
- Location of pest controls, e.g. electroblitzes, bait boxes.

You should make it very clear on the site plan which things are included in your RMP and which things are not. A highlighter or coloured pen could be used to show this. If you don't show what is in and what is out it will be assumed that everything on the diagram is included.

If you are attaching a site plan on a separate sheet as part of the RMP it should have the section number on it and be initialled and dated. An example is given on the next page.

2.5.2 Section 6: Special Requirements for Dual Operator Butchers

Review this to ensure that you can comply with it.

2.5.3 Section 7: Other Activities

Tick the relevant box and follow instructions given in italics. By "adversely affected" we mean "will the activity introduce food safety hazards that need to be controlled to the butchery"?

2.5.4 Section 8: Sharing with Other Operators

Tick the relevant box and follow instructions given in italics.

5. Physical Boundaries

Draw or attach a Site Plan showing:

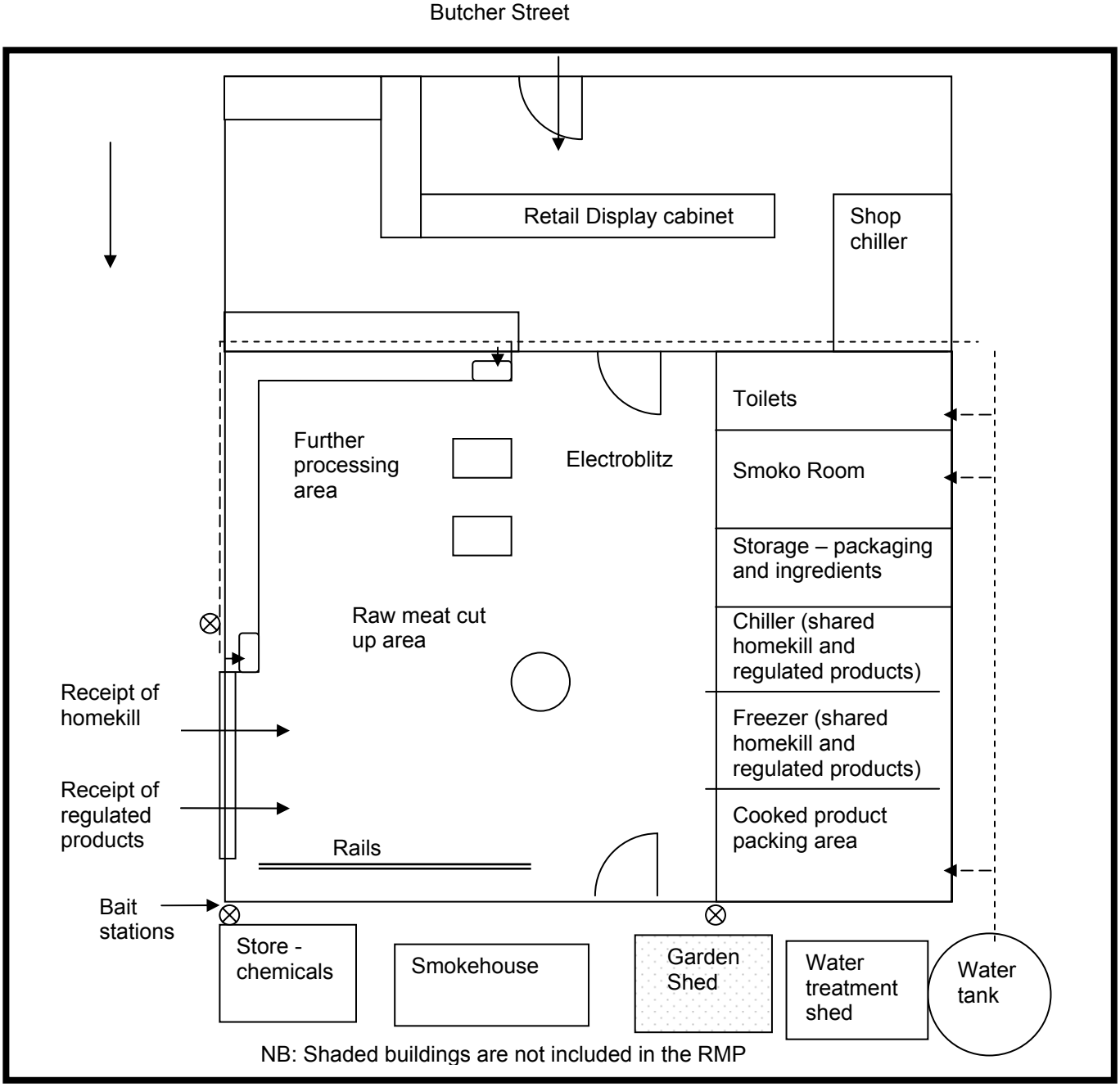
land

butchery buildings with relevant areas shown, e.g. retail area, meat reception areas (regulated and homekill), processing areas (raw products and ready-to-eat products), chillers, freezers, storage areas, smoko rooms, toilets

other buildings on the same land (even if not owned by you)

water treatment (e.g. chlorination or filtration units) or storage facilities(e.g. tanks)

location of any pest controls, e.g. electroblitzes, bait boxes



2.5.5 Section 9: Regulated Animal Products Entering Butchery

Indicate the types of regulated animal products that are covered under the RMP by ticking the appropriate boxes. If you process an animal product that is not listed, add this in the gaps provided. Do not include homekill or recreational catch products.

2.5.6 Section 10: Final Product and Process Description – Regulated Animal Products

First column: **Products:** List all of the types of animal products that you make for human or animal consumption (one product per row, e.g. ham, sausages, raw meat cuts). Copy the second page of the form as many times as necessary to give you room for each product.

Second column: **Intended consumer:** State whether each product is intended for human or animal consumption.

Third column: **Product Description:** List the following for each product:

- **Status:** state whether the product is raw, pre-cooked or ready-to-eat.
- **Regulatory Limits:** you do not need to add anything for this yet as the NZFSA has not set any regulatory limits to date.
- **Food Standards Code requirements:** Check section 4 of this resource manual to see if there are any specific requirements for each of your products and if so, add details into the table.
- **Important product characteristics:** Add anything else which is particularly important to the product type, e.g. pH level. See Table 2 of Attachment Q (critical limits and monitoring procedures) for ideas on the parameters that could be added here.

Fourth column: **Inputs:** List the following that is used for each product:

- **meat type**, e.g. species, carcass or cut and chilled or frozen as appropriate,
- **ingredients**, e.g. preservative type, premix, and
- **packaging**, e.g. vacuum pack bag, tray pack, soaker pad.

Fifth Column: **Process steps:** For each product, enter the process steps in the order that you do them. It may help to write down the process first on a separate piece of paper. To save room when entering them on the form, pick the relevant process steps that are listed at the bottom of the page and enter

the corresponding numbers. e.g. if you make a product by doing the following steps: receive regulated product (1), store (2), break-up carcass (4), package (20), weigh (21), display and sell at retail (23) enter 1, 2, 4, 20, 21, 23. If you do other process steps that are not listed, add them to the bottom of the form and number them 28a, 28b, 28c, 28d etc. (as 25 – 27 and 29 have been used already in Attachment P and we want the numbers to correspond for easy cross referencing).

Sixth Column: **Shelf Life and Storage Temperature:** Enter the shelf life of the product (in number of days or weeks as appropriate) and the storage temperature that is necessary to achieve this shelf life. You may have more than one shelf life for each product, e.g. one each for chilled or frozen storage temperatures and another for vacuum packed storage conditions.

2.6 Guidance for completing all Attachments

The attachments describe the hygienic practices and procedures that you will comply with to ensure the consistent production of products that are fit for their intended purpose. The external verifier (i.e. NZFSA Verification Agency) will verify the effectiveness of the RMP by checking that you comply with these procedures and requirements.

Read each attachment thoroughly.

Ensure that all the written procedures apply to your operation and that you will be able to comply with them. If a whole section is not applicable to your operation put N/A by the title and put a line through the section. If some statements are incorrect for your operation, cross them out and write in what you do instead. The NZFSA may ask you to justify any changes that you have made.

Some attachments require that you provide information specific to your operation (e.g. cleaning schedule). Provide the required information by:

- entering information into the empty boxes or blank lines, and rows or columns in tables,
- ticking the appropriate answer or information, and/or
- if the space provided are not enough or suitable for the information you want to include, attach additional pages or your own written procedures to the relevant attachment.

For any pages you add to the RMP, make sure that you add document names, page numbers and dates (similar to those from the original attachment) to the top of each page.

Ensure that any additional documents are listed in the RMP Document List in section 4 of the introductory part of the template.

Initial the bottom of every page to indicate that you fully understand the procedures and requirements and that you are complying, or will be able to comply with them.

Most attachments should be reasonably self-explanatory. If you have difficulty understanding or completing an attachment you should give feedback to the NZFSA so that the template can be improved.

2.7 Guidance for completing parts of specific Attachments

2.7.1 Attachment E: Cleaning / Housekeeping

Page 2 Enter the steps used for cleaning in the order you do them for each area. To save room when entering them on the form, pick the relevant steps from the list given at the bottom of the page. e.g. if you dismantle equipment (D), remove waste (W), rinse (R), hot wash (H), rinse (R), sanitise (S) and rinse (R), enter D, W, R, H, R, S, R. If you use other steps that are not listed, add them to the bottom of the form and give them an available letter code. You should also add further relevant details e.g. the temperature used for the hot wash, and the detergent or sanitisers used and their concentrations when used (or how much you dilute them).

Recommended Sanitisers: Quaternary ammonium compounds are effective against *L. monocytogenes.* Peroxycetic acid sanitisers are effective against biofilms containing *L. monocytogenes.*

Area / Equipment	Sanitiser	Concentration / Dosage
Food contact surfaces	QAC	200 ppm
	Iodine / Iodophors	25 ppm
	Chlorine	200 ppm
	Hot water / steam	71 ^{O} C
	Peroxyacetic acid	200 ppm

Area / Equipment	Sanitiser	Concentration / Dosage
Non – food contact Surfaces	QAC	400 ppm
Cleaning equipment, mops, brushes, pads etc.	QAC	600 – 1000 ppm
Footbaths	QAC	400 – 800 ppm
Drains	QAC	400 ppm
Floors	QAC	400 ppm
Walls / ceilings	QAC	400 ppm

It is highly recommended that the effectiveness of cleaning and sanitation is verified by microbiological testing. Samples should be taken of non-product contact surfaces and product contact surfaces at regular intervals after sanitising. Sample in accordance with attached procedures from the MIRINZ manual 873 (See Section 7 of this Resource Manual). Results for Standard Plate Count above 100cfu/10cm^2 after sanitising are considered out of compliance; those less than or equal to 100 are considered in compliance.

2.7.2 Attachments F, F1 and F2: Water

Attachment F is to be completed for **all water supplies** irrespective of source.

Attachment F1 only needs to be completed by those butchers who **supply their own water**. If this does not apply to you write N/a on the top of the page. If you do need to complete this you will also need to fill out record 1.

If you have to completed Attachment F1 and your water is not yet potable, then you will need to treat it to control likely hazards and fill out Attachment F2 explaining how you treat it. You are strongly advised to seek expert advice to help you to develop a treatment system for the supply of water from this source. Your local council may be able to help with this or advise you of who to contact for assistance.

Attachment F2 only needs to be completed by those butchers who **treat water** supplied by them or someone else to make it potable (suitable for drinking). If this does not apply to you write N/a on the top of the page.

2.7.3 Attachment H: Product Contact Packaging

Under 3.1 you are required to have evidence that your product contact packaging meets one of the 2 listed standards. Contact your supplier to get a letter from them with this information. If you use packaging that is not listed, add it to the list.

2.7.4 Attachment L: Verification / Notification

Page 2 **External Verification:** The operator or the day-to-day manager of the RMP must sign this section to grant the external verifier the freedom and access necessary to carry out their verification activities. Do not change or add anything else to this section.

The pre-ticked box states that a letter has been received from the recognised RMP verifying agency confirming that they will verify the RMP. **You need to fill out and send off the "Verification Services Request Form for Dual Operator Butchers" to the correct person, (see section 3 of this resource manual), to set this up and get the letter.**

2.7.5 Attachment P: Process Control

Compare the process steps identified in section 10 of the introductory part of the RMP with the steps in this attachment.

If a step in this attachment is not applicable to your operation put N/a by the relevant heading and cross out the statements that don't apply.

If a step is identified in section 10 of the introductory part of the RMP but is not covered in this attachment, add the extra steps to section 3.28 and add details on the control measures that you use. Use extra pages if necessary.

Where there are blank lines, tables or tick-boxes, fill these out with your details.

NB: Those steps with (critical) by the heading and in bold are very important to control food safety hazards.

2.7.5.1 Fermentation and maturation

The following is an example of the sort of information required for this process step. If you need further help contact the NZFSA, ph 04 4632-500 and ask for Lisa Hill, Christine Esguerra, Lennox Vellekoop or Nicola Bowden.

The microbiological quality of incoming raw materials used for uncooked fermented meats is determined by *(tick one)*:

[ ] Testing of raw materials for Aerobic Plate Count and *E. coli* prior to use; or

[ ] Historical test results for Aerobic Plate Count and *E. coli* from suppliers; or

[ ] National database results for Aerobic Plate Count and *E. coli.* (This data is available from New Zealand and Australia and should be available from US– listed beef suppliers and from US-listed Canadian and Danish pork suppliers).

[✓] Fermentation is initiated with a starter culture.

[✓] Starter cultures are not back-slopped, i.e. fermented meat is not used as a starter culture.

[✓] Starter cultures are stored, handled and used in accordance with the manufacturer's instructions and are not used after their expiry dates.

[✓] Fermentation and maturation is done in accordance with the following table (*fill in the details*);

		Product 1	Product 2	Product 3	Product 4
Product type & weight, e.g. salami 500g					
FERMENTATION					
Temperature	Start	……..°C	……..°C	……..°C	……..°C
	End	……..°C	……..°C	……..°C	……..°C
Fermentation time at	… ^{0}C	…… hrs	…… hrs	…… hrs	…… hrs
	… ^{0}C	…….. hrs	…….. hrs	…….. hrs	…….. hrs
Relative humidity	Start	……..%	……..%	……..%	……..%
	End	……..%	……..%	……..%	……..%
pH	Start	……..	……..	……..	……..
	24 hrs	……..	……..	……..	……..
	48 hrs	……..	……..	……..	……..
	End	……..	……..	……..	……..
RIPENING/ DRYING/ MATURATION					
Time	Days	……	……	……	……
Temperature	Start	…….. °C	…….. °C	…….. °C	…….. °C
	End	…….. °C	…….. °C	…….. °C	…….. °C
Relative humidity	Start	……..%…….%	……..%…….%	……..%…….%	……..%…….%
	End	……..%…….%	……..%…….%	……..%…….%	……..%…….%
Weight loss at the end of drying		…….. %	…….. %	…….. %	…….. %

[✓] The fermentation and maturation parameters used for each batch are recorded.

The microbiological quality of final product is determined by *(tick one):*

[ ] Testing batches of final product for *E. coli* until sufficient "not detected" results have been achieved *(as agreed with the NZFSA during the registration process)*; or

[ ] Providing the NZFSA with sufficient detail on process parameters used so that the NZFSA can validate the process. *(The NZFSA will contact you during the RMP registration process if further information is required).*

2.7.5.2 Cooking temperatures

The recommended cooking temperatures given under Attachment P, step 3.16 were obtained from a process lethality model at www.meatami.com and the times were calculated for a 7D destruction of *Listeria monocytogenes* and have been rounded up to the nearest minute for extra safety. Reference: Scott A: *D-Value and Z-Value Determinations in Ground Beef and Turkey*. J. Food Prot. 54:756-761. J. Scott and L. Weddig. 1998. Principles of Integrated Time-Temperature Processing. Meat Industry Research Conference proceedings.

2.7.6 Attachment Q: Hazard Identification and Control

This section has been written for you, and should not need to be altered unless you have additional processes that were not covered in the template. In this case you will need to change or add details to agree with **Attachment P**. This section is reasonably technical and you may need assistance from a competent person for this. If so, contact the NZFSA for advice on who can help you do this.

2.7.7 Attachment R: Other Risk Factor Identification and Control

This section has been written for you, and should not need to be altered.

Risks to wholesomeness include things that the consumer would find unexpected or objectionable. Risks from false or misleading labeling is self-explanatory.

Once you have finished reviewing the attachments, go back and complete section 4.

You have now completed your RMP and you are ready for registration.

2.8 RMP registration

After you have completed the RMP, you must apply to the NZFSA for registration using application form AP3: Dual Operator Butcher 'Registration of Risk Management Programme and Listing of Homekill and Recreational Catch Service Provider'. If you don't have one, contact the NZFSA or download it from: http://www.nzfsa.govt.nz/animalproducts/publications/forms/index.htm. Follow the instructions in the cover letter with respect to the evaluation requirements.

You must send the completed AP3 and all of the required documentation to the NZFSA with an application fee. The NZFSA may ask for clarification or further information on any part of the RMP. There may be an additional assessment fee charged for the time of the NZFSA assessor. Once all fees are paid and the NZFSA is satisfied with the RMP, it will be registered.

2.9 RMP implementation

You must then operate your registered RMP as written, so you must:

- Train staff if necessary and record how and when you did this (in a diary will do);
- Start following the procedures as soon as possible; and
- Write up and keep the required records.

2.10 External verification

You will be verified by your external verifier to make sure that you are complying with your RMP and the law. The verification policies that will apply are available at the bottom of the following web page:
http://www.nzfsa.govt.nz/animalproducts/publications/policystatements/index.htm

3 Verification Services Request Form for Dual Operator Butchers

Amendment 1

March 2010

I request NZFSA Verification Agency (NZFSAVA) to provide verification services in relation to my Risk Management Programme (RMP).

* Date	
* Name of Operator of RMP	
* Physical Address	
Postal address (specify if different from the physical address)	
* Phone Number of Operator	
Email Address (where applicable)	
* Signature of Operator (signature to be included where form is submitted by post. Where form is submitted electronically, specify "email" instead of signature)	

All boxes on the form indicated with * must be completed, once completed please return the completed form to

Coordinator (Technical)

NZFSA Verification Agency

PO Box 2835

Wellington

email: VA.RMPRegistrations@nzfsa.govt.nz

4 Food Standards Code

Amendment 0

January 2005

4.1 Standard 1.2.1: Application of Labelling and Other Information Requirements

4.1.1 Purpose

This Standard sets out the application of general labelling and other information requirements contained in Part 1.2. and labelling and information requirements specific to certain foods in Chapter 2 of this Code. This Part sets out the labelling requirements for food for sale and information that must be provided in conjunction with the sale of certain foods, where labelling is not required. Food Product Standards in Chapter 2 may impose additional labelling and information requirements for specific classes of food.

4.1.2 Interpretation

In this Part -

foods for catering purposes means those foods for use in restaurants, canteens, schools, caterers or self catering institutions, where food is offered for immediate consumption.

intra company transfer means a transfer of food between elements of a single company, between subsidiaries of a parent company or between subsidiaries of a parent company and the parent company.

retail sale means sale to the public.

small package means a package with a surface area of less than $100cm^2$.

transportation outer means a container or wrapper which encases packaged or unpackaged foods for the purpose of transportation and distribution and which is removed before the food is used or offered for retail sale or which is not taken away by the purchaser of the food.

4.1.3 Labelling of food for retail sale or for catering purposes

(1) Subject to subclause (2), food for retail sale or for catering purposes must bear a label setting out all the information prescribed in this Code, except where –

(a) the food is other than in a package; or

(b) the food is in inner packages not designed for sale without an outer package, other than individual portion packs with a surface area of no less than 30 cm^2, which must bear a label containing a declaration of certain substances in accordance with clause 4 of Standard 1.2.3; or

(c) the food is made and packaged on the premises from which it is sold; or

(d) the food is packaged in the presence of the purchaser; or

(e) the food is whole or cut fresh fruit and vegetables, except sprouting seeds or similar products, in packages that do not obscure the nature or quality of the fruit or vegetables; or

(f) the food is delivered packaged, and ready for consumption, at the express order of the purchaser; or

(g) the food is sold at a fund raising event.

(2) Notwithstanding subclause (1), food for retail sale or for catering purposes must comply with any requirements specified in –

(a) subclause 2(2) of Standard 1.2.3; and

(b) subclause 3(2) of Standard 1.2.3; and

(c) subclause 4(2) of Standard 1.2.3; and

(d) subclause 5(2) of Standard 1.2.3; and

(e) clause 2 of Standard 1.2.6; and

(f) subclause 4(2) of Standard 1.2.8; and

(g) subclause 4(3) of Standard 1.2.8; and

(h) subclause 4(3) of Standard 1.5.2

(i) clause 6 of Standard 1.5.3; and

(j) subclause 2(3) of Standard 1.2.10; and

(k) subclause 4(3) of Standard 2.2.1; and

(l) clauses 5, 6, and 10 of Standard 2.2.1; and

(m) clause 3 of Standard 2.2.3; and

(n) subclause 3(2) of Standard 2.6.3; and

(o) subclause 3(3) of Standard 2.6.4; and

(p) subclause 3(4) of Standard 2.6.4.

4.1.4 Labelling of food not for retail sale etc.

(1) Subject to subclause (2), food –

(a) not for retail sale; or

(b) not for catering purposes; or

(c) supplied as an intra company transfer;

must bear a label containing the information prescribed in clauses 1, 2 and 3 of Standard 1.2.2, except where the –

(d) food is other than in a package; or

(e) food is in an inner package or packages contained in an outer package where the label on the outer package includes the information prescribed in clauses 1, 2 and 3 of Standard 1.2.2; or

(f) food is in a transportation outer and the information prescribed in clauses 1, 2 and 3 of Standard 1.2.2 is clearly discernable through the transportation outer on the labels on the packages within.

(2) The information prescribed in clause 3 of Standard 1.2.2 is not required to be on the label on a food where that information is provided in documentation accompanying that food.

4.1.5 Provision of information in relation to food not for retail sale etc.

(1) Where a purchaser or relevant authority has so requested, a package of food which is –

(a) not for retail sale; or

(b) not for catering purposes; or

(c) supplied as an intra company transfer;

must be accompanied by sufficient information in relation to that food to enable the purchaser to comply with the –

(d) compositional requirements of this Code; and

(e) labelling or other declaration requirements of this Code.

(2) The information referred to in subclause (1) must be supplied in writing where the relevant authority or purchaser has so requested.

4.2 Standard 1.2.3: Mandatory Warning and Advisory Statements and Declarations

4.2.1 Purpose

This Standard sets out mandatory advisory statements and declarations which must be made in relation to certain foods or foods containing certain substances.

4.2.2 Mandatory advisory statements and declarations

(1) The label on a package of food listed in column 1 of the Table to this clause must include the advisory statement listed in relation to that food in column 2 of the Table.

(2) Where a food listed in column 1 of the Table to this clause is not required to bear a label pursuant to clause 2 of Standard 1.2.1, the advisory statement listed in relation to that food in column 2 of the Table, must be –

(a) displayed on or in connection with the display of the food; or

(b) provided to the purchaser upon request.

Editorial note:

Paragraph 2(2)(b) allows the retailer of a food to provide the information specified in the Table to clause 2 verbally or in writing.

Editorial note:

'Milk' is defined in Standard 2.5.1. – 'dried milks' and 'evaporated milks' are defined in Standard 2.5.7.

The term 'reconstituted' in the Table to clause 2 means, in relation to evaporated milks and dried milks, reconstituted to the original level of hydration.

Aspartame-acesulphame salt (INS 962) is specified in the Table to clause 2 because it is a food additive which is distinct from mixtures of aspartame and acesulphame K.

Table to clause 2

Column 1	Column 2
Food	**Advisory Statement**
Bee pollen	Statement to the effect that the product contains bee pollen which can cause severe allergic reactions
Evaporated milks, dried milks and equivalent products made from soy or rice, where these foods contain no more than 2.5% m/m fat as reconstituted according to directions for direct consumption	Statement to the effect that the product is not suitable as a complete milk food for children under the age of two years
Food containing aspartame or aspartame-acesulphame salt	Statement to the effect that the product contains phenylalanine
Food containing quinine	Statement to the effect that the product contains quinine
Food containing guarana or extracts of guarana	Statement to the effect that the product contains caffeine
Food regulated in Standard 2.4.2 containing phytosterol esters	Statements to the effect that - 1. the product should be consumed in moderation as part of a diet low in saturated fats and high in fruit and vegetables; 2. the product is not recommended for infants, children and pregnant or lactating women unless under medical supervision; and 3. consumers on cholesterol-lowering medication should seek medical advice on the use of this product in conjunction with their medication.
Food regulated in Standard 2.4.2 containing tall oil phytosterols	Statements to the effect that - 1. the product should be consumed in moderation as part of a diet low in saturated fats and high in fruit and vegetables; 2. the product is not recommenced for infants, children and pregnant or lactating women unless under medical supervision; and 3. consumers on cholesterol-lowering medication should seek medical advice on the use of this product in conjunction with their medication.
Kola beverages containing added caffeine	Statement to the effect that the product contains caffeine
Milk, and beverages made from soy or rice, where these foods contain no more than 2.5% m/m fat	Statement to the effect that the product is not suitable as a complete milk food for children under the age of two years
Propolis	Statement to the effect that the product contains propolis which can cause severe allergic reactions
Unpasteurised egg products	Statement to the effect that the product is unpasteurised
Unpasteurised milk and unpasteurised liquid milk products	Statement to the effect that the product has not been pasteurised

4.2.3 Mandatory warning statements and declarations

(1) The label on a package of food listed in column 1 of the Table to this clause must include the warning statement listed in relation to that food in column 2 of the Table.

(2) Where a food listed in column 1 of the Table to this clause, is not required to bear a label pursuant to clause 2 of Standard 1.2.1, the warning statement listed in relation to that food in column 2 of the Table, must be displayed on or in connection with the display of the food.

Table to clause 3

Column 1	Column 2
Food	**Warning Statement**
Royal jelly when presented as a food; or Food containing royal jelly as an ingredient as defined in Standard 1.2.4	This product contains royal jelly which has been reported to cause severe allergic reactions and in rare cases, fatalities, especially in asthma and allergy sufferers

4.2.4 Mandatory declaration of certain substances in food

(1) The presence in a food of any of the substances listed in the Table to this clause, must be declared in accordance with subclause (2), when present as -

(a) an ingredient; or

(b) an ingredient of a compound ingredient; or

(c) a food additive or component of a food additive; or

(d) a processing aid or component of a processing aid.

(2) Any substances required to be declared by subclause (1) must be –

(a) declared on the label on a package of the food; or

(b) where the food is not required to bear a label pursuant to clause 2 of Standard 1.2.1 -

(i) displayed on or in connection with the display of the food; or

(ii) provided to the purchaser upon request.

Editorial note:

Paragraph 4(2)(b) allows the retailer of a food to provide the information specified in the Table to clause 2 verbally or in writing.

Table to clause 4

Cereals containing gluten and their products, namely, wheat, rye, barley, oats and spelt and their hybridised strains other than where these substances are present in beer and spirits standardised in Standards 2.7.2 and 2.7.5 respectively
Crustacea and their products
Egg and egg products
Fish and fish products
Milk and milk products
Peanuts and soybeans, and their products
Added Sulphites in concentrations of 10 mg/kg or more
Tree nuts and sesame seeds and their products

Editorial note:

1. Clause 4 can be complied with by listing those substances in the Table in the ingredient list.

2. Any exemptions in relation to ingredient listing do not override the requirement to declare the presence of the substances listed in the Table to clause 4.

3. Manufacturers occasionally substitute one ingredient for another within the same class of foods. Where this involves a substance listed in the Table to clause 4 there must be an indication on the label that the substance is in the food. Manufacturers may indicate in the ingredient list that the product contains one substance or another (e.g. brazil nuts or cashew nuts) in cases where substitutions occur regularly.

4. Expressions such as 'egg and egg product' or 'crustacea and their products' include all products derived from the substance listed in the Table to clause 4.

5. Sulphites should be declared in the same manner as other food additives.

6. Coconut is the fruit of the palm (*Cocos nucifera*) and is not generally considered to be a tree nut.

4.2.5 Advisory statement in relation to foods containing polyols or polydextrose

(1) The label on a package of food must include an advisory statement to the effect that excess consumption of the food may have a laxative effect, where the food contains any of the substances –

(a) listed in Table 1 to this clause, either singularly or in combination at a level of or in excess of 10g/100g; or

(b) listed in Table 2 to this clause, either singularly or in combination at a level of or in excess of 25g/100g; or

(c) listed in Table 1 in combination with any of the substances listed in Table 2 at a level of or in excess of 10g/100g.

(2) Where food containing any of the substances referred to in subclause (1) is not required to bear a label pursuant to clause 2 of Standard 1.2.1, an advisory statement to the effect that excess consumption of the food may have a laxative effect, must be –

(a) displayed on or in connection with the display of the food; or

(b) provided to the purchaser upon request.

Editorial note:

Paragraph 5(2)(b) allows the retailer of a food to provide the information specified in the Table to clause 2 verbally or in writing.

Table 1 to clause 5

Substance
Lactitol
Maltitol
Maltitol syrup
Mannitol
Xylitol

Table 2 to clause 5

Substance
Erythritol
Isomalt
Polydextrose
Sorbitol

4.3 Standard 1.2.10: Characterising Ingredients and Components of Food

4.3.1 Purpose

This Standard sets out specific requirements for the declaration of the percentage of characterising ingredients and components of certain food products which are required to be declared.

4.3.2 Interpretation

(1) In this Standard -

characterising component means a component of a food that -

(a) is mentioned in the name of a food; or

(b) is usually associated with the name of a food by the consumer; or

(c) is emphasised on the label of a food in words, pictures or graphics.

Editorial note:

Two examples of characterising components of food are milkfat in ice cream and cocoa solids in chocolate.

characterising ingredient means an ingredient or category of ingredients that -

(a) is mentioned in the name of a food; or

(b) is usually associated with the name of a food by the consumer; or

(c) is emphasised on the label of a food in words, pictures or graphics;

but does not include -

(d) an ingredient or a category of ingredients which is used in small quantities for the purposes of a flavouring; or

(e) an ingredient that is the sole ingredient of a food; or

(f) a category of ingredients that comprises the whole of the food; or

(g) an ingredient or category of ingredients which, while mentioned in the name of the food, is not such as to govern the choice of the consumer, because the variation in

the quantity is not essential to characterise the food, or does not distinguish the food from similar foods.

(2) Compliance with labelling requirements elsewhere in this Code does not of itself constitute emphasis for the purposes of paragraph (c) of the definition of characterising component or characterising ingredient.

Editorial note:

Standard 1.2.4 defines 'ingredient' as 'any substance, including a food additive, used in the preparation manufacture or handling of a food'. A component of a food that is naturally present in a food is not an ingredient of the food and therefore cannot be a characterising ingredient. For example, caffeine that is naturally present in coffee or tea is not an ingredient and therefore cannot be a characterising ingredient.

Examples of ingredients that are mentioned in the name of the food include '*strawberry* yoghurt', and '*steak* and *kidney* pie'. An example of a category of ingredients mentioned in the name of the food is 'vegetables' in a '*vegetable* pastie' and 'meat' in a '*meat* pie'.

In deciding which ingredients are 'usually associated with the name of a food by a consumer', for example, 'chilli con carne', consideration should be given to what an appropriate descriptive name for the product might be, were this to be given.

Some examples are -

'Chilli con carne' could be described as 'chilli flavoured minced beef with kidney beans'. Given this description, the proportion of 'minced beef' and 'kidney beans' should be declared. The proportion of 'chilli' would not be required to be declared as it is added for the purposes of a flavouring and would be exempt under paragraph (d) of the definition.

A 'spring roll' could be described as 'vegetables in a light pastry'. The proportion of 'vegetables' in the spring roll would in this case be declared.

Examples of ingredients that are emphasised on the label of a food in words, pictures or graphics would include an illustration of 'fruit and nuts' in fruit and nut chocolate, or 'cheese' if it is emphasised by words on the label such as 'extra cheese'.

4.3.3 Declaration of characterising ingredients and characterising components

(1) Subject to subclause (2), subclause (3) and subclause (4), the label on a package of food must include a declaration of the proportion of characterising ingredients and characterising components of the food, calculated and expressed in accordance with this Standard.

(2) Where the proportion of a characterising component of a food is declared in accordance with this Standard, the proportion of ingredients or category of ingredients containing that characterising component is not required to be declared.

Editorial note:

For example, where the proportion of 'cocoa solids' in chocolate is declared, it is not necessary to declare the proportion of the ingredients that comprise the 'cocoa solids'.

(3) A declaration of the percentage of the characterising ingredients and characterising components of a food, calculated and expressed in accordance with this Standard, where the -

(a) food is unpackaged; or

(b) food is made and packaged on the premises from which it is sold;

must be -

(c) displayed on or in connection with the display of the food; or

(d) provided to the purchaser upon request.

(4) Subclause (1) and subclause (3) do not apply to -

(a) food packaged in the presence of the purchaser; or

(b) foods for catering purposes; or

(c) food delivered packaged and ready for immediate consumption at the express order of the purchaser; or

(d) prepared filled rolls, sandwiches, bagels and similar products; or

(e) food sold at fund raising events; or

(f) food in a small package; or

(g) food standardised in Standard 1.1A.1 or Standard 2.9.1.

(h) cured and/or dried meat flesh in whole cuts or pieces; or

(i) alcoholic beverages standardised in Part 2.7 of this Code.

Editorial note:

Cured and/or dried meat flesh in whole cuts or pieces is defined in Standard 2.2.1.

These declarations must be considered in the light of the prohibitions on false, misleading or deceptive representations in the Food or Health Acts and fair trading laws of New Zealand and the States, Territories and the Commonwealth. In so doing it is necessary to consider whether a false or misleading impression is conveyed to a purchaser of a particular food product.

In order to determine whether the characterising components or characterising ingredients of a food should be declared, a manufacturer of food should consider which declaration best reflects the nature of the food as sold. For example, milkfat is not typically an ingredient in ice cream, but would be considered to be a characterising component in ice cream, and should be so declared.

4.3.4 Method of calculating the proportion of characterising ingredients by ingoing weight

(1) Subject to clause 4 and clause 4A, the proportion of a characterising ingredient or category of ingredients must be calculated in accordance with this clause, by dividing the ingoing weight of the ingredient or total weight of the ingredients within the category of ingredients by the total weight of all the ingoing ingredients of the food, and multiplying this amount by 100.

(2) The weight of added water or volatile ingredients removed in the course of manufacture of the food must not be included in the weight of the ingoing ingredients for the purposes of the calculation set out in subclause (1).

(3) Where a concentrated or dehydrated ingredient or category of ingredients is reconstituted during the manufacture of the food, the weight of the reconstituted ingredient or category of ingredients may be used in the calculation set out in subclause (1).

(4) The proportion of a characterising ingredient or category of ingredients of a food that requires reconstitution prior to consumption may be calculated as a proportion of the food as reconstituted.

(5) The proportion of a characterising ingredient or category of ingredients may be calculated using the ingoing weight or minimum ingoing weight of the characterising ingredient or category of ingredients, provided that where a minimum ingoing weight is used, the declaration is made in accordance with paragraph 5(3)(b).

4.3.5 Method of calculating the proportion of characterising ingredients where moisture loss occurs

Where moisture loss occurs in the processing of a food, the proportion of the characterising ingredient or category of ingredients in the final food, may be calculated taking into account any such moisture loss, on the basis of the weight of the characterising ingredient or category of ingredients in the final food.

4.3.6 Method of determining the proportion of the characterising ingredient where the proportion is declared in a nutrition information panel

Unless otherwise specified, where the proportion of a characterising ingredient is declared in a nutrition information panel, the amount declared must be the average quantity of the characterising ingredient or category of ingredients present in the final food.

4.3.7 Method of declaration of characterising ingredients

(1) The proportion of a characterising ingredient or category of ingredients must -

(a) be declared as a percentage, and where declared in a statement of ingredients, the percentage must immediately follow the common, descriptive or generic name of the ingredient; or

(b) unless otherwise specified, be declared as the average quantity, where declared in a nutrition information panel -

(i) per serving and per 100 g; or

(ii) per serving and per 100 mL.

(2) The declared percentage may be rounded to the nearest whole number or to the nearest 0.5 decimal place in those cases where it is below 5%.

(3) The proportion of a characterising ingredient or category of ingredients must be declared -

(a) as the actual percentage; or

(b) as a minimum percentage; or

(c) unless otherwise specified, as the average quantity where declared in a nutrition information panel.

(4) Where a minimum percentage is declared it must be clearly indicated that it is a minimum percentage.

(5) The proportion of a characterising ingredient or category of ingredients of a food that requires reconstitution prior to consumption as calculated in accordance with subclause 3(4) may be declared as a percentage of the food as reconstituted, provided that the basis of this declaration is clearly indicated.

Editorial note:

Clause 5 may be complied with, for example, by asterisking all declared minimum percentages and including an asterisked note at the end of the ingredient list stating 'minimum percentage'.

4.3.8 Method of calculating the proportion of characterising components

(1) Subject to subclause (3), the proportion of a characterising component of a food must be calculated by dividing the weight of the characterising component of the food by the total weight of the food and multiplying this amount by 100.

(2) The proportion of a characterising component of a food that requires reconstitution prior to consumption may be calculated as a proportion of the food as reconstituted.

(3) The proportion of a characterising component may be calculated using the actual weight or minimum weight of the characterising component, provided that where a minimum weight is used, the declaration is made in accordance with paragraph 7(3)(b).

(4) Unless otherwise specified, where the proportion of a characterising component is declared in a nutrition information panel, the amount declared must be the average quantity of the characterising component present in the final food.

4.3.9 Method of declaration of characterising components

(1) The proportion of a characterising component of a food must -

(a) be declared as a percentage; or

(b) unless otherwise specified, be declared as the average quantity where declared in a nutrition information panel -

(i) per serving and per 100 g; or

(ii) per serving and per 100 mL.

(2) The percentage declared must be rounded to the nearest whole number or to the nearest 0.5 decimal place in those cases where it is below 5%.

(3) The proportion of a characterising component of a food must be declared -

(a) as an actual percentage; or

(b) as a minimum percentage; or

(c) unless otherwise specified, the average quantity, where declared in a nutrition information panel.

(4) Where a minimum percentage is declared it must be clearly indicated that it is a minimum percentage.

(5) The proportion of a characterising component of a food that requires reconstitution prior to consumption may be declared as a percentage of the food as reconstituted, provided that the basis of this declaration is clearly indicated.

4.4 Standard 1.3.1 Food Additives

4.4.1 SCHEDULE 1: Permitted uses of food additives by food type

	INS Number	Additive Name	Max Permitted Level		Qualifications
8	**MEAT AND MEAT PRODUCTS (including poultry and game)**				
8.1	**Raw meat, poultry and game**				
		Additives in Schedules 2,3 & 4 must not be added to raw meat, poultry and game unless expressly permitted below			
	fresh poultry				
	262	Sodium acetates	5000	mg/kg	
8.2	**Processed meat, poultry and game products in whole cuts or pieces***				
	commercially sterile canned cured meat				
	249 250	Nitrites (potassium and sodium salts)	50	mg/kg	
	cured meat				total of nitrates and nitrites, calculated as sodium nitrite
	249 250	Nitrites (potassium and sodium salts)	125	mg/kg	
	dried meat				
	200 201 202 203	Sorbic acid and sodium, potassium and calcium sorbates	1500	mg/kg	
	249 250	Nitrites (potassium and sodium salts)	125	mg/kg	total of nitrates and nitrites, calculated as sodium nitrite
	slow dried cured meat				
	249 250	Nitrites (potassium and sodium salts)	125	mg/kg	total of nitrates and nitrites, calculated as sodium nitrite
	251 252	Nitrates (potassium and sodium salts)	500	mg/kg	
8.3	**Processed comminuted meat, poultry and game products***				
	160b	Annatto extracts	100	mg/kg	
	220 221 222 223 224 225 228	Sulphur dioxide and sodium and potassium sulphites	500	mg/kg	
	249 250	Nitrites (potassium and sodium salts)	125	mg/kg	total of nitrates and nitrites, calculated as sodium nitrite
	fermented, uncooked processed comminuted meat products				
	200 201 202 203	Sorbic acid and sodium, potassium and calcium sorbates	1500	mg/kg	

	INS Number	Additive Name	Max Permitted Level		Qualifications
	235	Pimaricin (natamycin)	1.2	mg/dm^2	when determined in a surface sample taken to a depth of not less than 3 mm and not more than 5 mm including the casing, applied to the surface of food.
	251 252	Nitrates (potassium and sodium salts)	500	mg/kg	total of nitrates and nitrites, calculated as sodium nitrite
	sausage and sausage meat containing raw, unprocessed meat				
		Additives must not be added to sausage and sausage meat containing raw, unprocessed meat, unless expressly permitted below			
-		**Additives in Schedule 2**			
	220 221 222 223 224 225 228	Sulphur dioxide and sodium and potassium sulphites	500	mg/kg	
8.4	**Edible casings***				
	200 201 202 203	Sorbic acid and sodium, potassium and calcium sorbates	100	mg/kg	
	220 221 222 223 224 225 228	Sulphur dioxide and sodium and potassium sulphites	500	mg/kg	
8.5	**Animal protein products***				
9	**FISH AND FISH PRODUCTS**				
9.1	**Unprocessed fish and fish fillets (including frozen and thawed)**				
		Additives in Schedules 2,3&4 must not be present in unprocessed fish and fish fillets (including frozen and thawed) unless expressly permitted below			
	frozen fish				
	300 301 302 303	Ascorbic acid and sodium, calcium and potassium ascorbates	400	mg/kg	
	315 316	Erythorbic acid and sodium erythorbate	400	mg/kg	
	339 340 341	Sodium, potassium and calcium phosphates	GMP		
	450	Pyrophosphates	GMP		
	451	Triphosphates	GMP		

	INS Number	Additive Name	Max Permitted Level		Qualifications
	452	Polyphosphates	GMP		
	uncooked crustacea				
	220 221 222 223 224 225 228	Sulphur dioxide and sodium and potassium sulphites	100	mg/kg	
	300 301 302 303	Ascorbic acid and sodium, calcium and potassium ascorbates	GMP		
	315 316	Erythorbic acid and sodium erythorbate	GMP		
	330 331 332 333 380	Citric acid and sodium, potassium, calcium and ammonium citrates	GMP		
	500	Sodium carbonates	GMP		
	504	Magnesium carbonates	GMP		
	586	4-hexylresorcinol	GMP		
9.2	**Processed fish and fish products***				
	cooked crustacea				
	220 221 222 223 224 225 228	Sulphur dioxide and sodium and potassium sulphites	30	mg/kg	
	roe				
	123	Amaranth	300	mg/kg	
9.3	**Semi preserved fish and fish products***				
	160b	Annatto extracts	10	mg/kg	
	200 201 202 203	Sorbic acid and sodium, potassium and calcium sorbates	2500	mg/kg	
	210 211 212 213	Benzoic acid and sodium, potassium and calcium benzoates	2500	mg/kg	
	roe				
	123	Amaranth	300	mg/kg	
9.4	**Fully preserved fish including canned fish products***				
	220 221 222 223 224 225 228	Sulphur dioxide and sodium and potassium sulphites	30	mg/kg	
	385	Calcium disodium EDTA	250	mg/kg	
	canned abalone (paua)				
	220 221 222 223 224 225 228	Sulphur dioxide and sodium and potassium sulphites	1000	mg/kg	
	roe				
	123	Amaranth	300	mg/kg	

4.5 Standard 1.6.1: Microbiological Limits for Food

4.5.1 Purpose

This Standard lists the maximum permissible levels of foodborne micro-organisms that pose a risk to human health in nominated foods, or classes of foods. This Standard includes mandatory sampling plans, used to sample lots or consignments of nominated foods or classes of foods, and the criteria for determining when a lot or consignment of food poses a risk to human health and therefore should not be offered for sale, or further used in the preparation of food for sale. The microbiological standards included in the Schedule to this Standard are applicable to the foods listed in the Schedule.

4.5.2 Interpretation

In this Standard -

n means the minimum number of sample units which must be examined from a lot of food as specified in Column 3 of the Schedule in this Standard.

c means the maximum allowable number of defective sample units as specified in Column 4 of the Schedule.

m means the acceptable microbiological level in a sample unit as specified in Column 5 of the Schedule.

M means the level specified in Column 6 of the Schedule, when exceeded in one or more samples would cause the lot to be rejected.

defective sample unit means a sample unit in which a micro-organism is detected in a sample unit of a food at a level greater than m.

food means a food product listed in Column 1 of the Schedule.

micro-organism means a microbiological agent listed in Column 2 of the Schedule.

SPC means standard plate count at 30°C with an incubation time of 72 hours.

4.5.3 Application

(1) The foods listed in column 1 of the Schedule in this Standard must, subject to subclause (2) and subclause (3), comply with the microbiological limits set in relation to that food in the Schedule.

(2) The Standard Plate Count (SPC) in powdered infant formula with added lactic acid producing cultures must not exceed the microbiological limits set in the Schedule, prior to the addition of the lactic acid cultures to the food.

(3) Unpasteurised milk which is not for retail sale, is not required to comply with the microbiological limits set out in the Schedule to this Standard.

4.5.4 Sampling of foods for microbiological analysis

(1) At the point of sampling, a lot of a food must have taken from it, n sample units as specified in Column 3 of the Schedule in this Standard, unless specified otherwise in this Standard.

An authorised officer who takes or otherwise obtains a sample of food for the purpose of submitting it for microbiological analysis –

(a) shall not divide that sample into separate parts; and

(b) where the sample consists of one or more than one sealed package of a kind ordinarily sold by retail, must submit for such analysis that sample in that package or those packages in an unopened and intact condition.

(2) Where an authorised officer takes or otherwise obtains a sample of food which is the subject of a suspected food poisoning incident or consumer complaint, the results of an analysis conducted on such food are not invalid by reason that fewer sample units than prescribed have been analysed or that a sample unit analysed is smaller than prescribed.

4.5.5 Prescribed methods of analysis

(1) Subject to subclause (2) and subclause (3), the Australian/New Zealand Standard methods for Food Microbiology AS/NZS 1766, as of the date of commencement of this Standard, must be used to determine whether a food has exceeded the maximum permissible levels of the foodborne micro-organisms specified in relation to that food in the Schedule.

(2) Any equivalent method to those specified in subclause (1), as determined by the provisions of AS/NZS 4659 as of the date of commencement of this Standard, is permitted to be used for the purposes of this Standard.

(3) The Australia/New Zealand Standard Methods for Water Microbiology AS 4276 must be used for packaged water, packaged ice and mineral water.

4.5.6 Microbiological limits in food

A lot of a food fails to comply with this Standard if the –

(a) number of defective sample units is greater than c; or

(b) level of a micro-organism in a food in any one of the sample units exceeds M.

SCHEDULE

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Food	**Micro-organism**	**n**	**c**	**m**	**M**
Packaged cooked cured/salted meat	Coagulase-positive staphylococci/g	5	1	10^2	10^3
	Listeria monocytogenes/25 g	5	0	0	
	Salmonella/25 g	5	0	0	
Packaged heat treated meat paste and packaged heat treated pâté	*Listeria monocytogenes*/25 g	5	0	0	
	Salmonella/25 g	5	0	0	
All comminuted fermented meat which has not been cooked during the production process	Coagulase-positive staphylococci/g	5	1	10^3	10^4
	Escherichia coli/g	5	1	3.6	9.2
	Salmonella/25 g	5	0	0	
Cooked crustacea	Coagulase-positive staphylococci/g	5	2	10^2	10^3
	Salmonella/25g	5	0	0	
	SPC/g	5	2	10^5	10^6
Raw crustacea	Coagulase-positive staphylococci/g	5	2	10^2	10^3
	Salmonella/25 g	5	0	0	
	SPC/g	5	2	$5x10^5$	$5x10^6$
Ready-to-eat processed finfish, other than fully retorted finfish	*Listeria monocytogenes*/ g	5	1	0	10^2
Bivalve molluscs, other than scallops	*Escherichia coli*/g	5	1	2.3	7
Bivalve molluscs that have undergone processing other than depuration	*Listeria monocytogenes*/25 g	5	0	0	

4.6 Standard 2.2.1: Meat and Meat Products

4.6.1 Purpose

This Standard includes definitions, compositional and labelling requirements for meat and meat products. Processing requirements for processed meat products, including fermented comminuted meat products are contained in Standard 1.6.2.

The Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) prescribe mandatory standards in Australia, but not New Zealand, that control the hygienic slaughter of animals for human consumption.

4.6.2 Interpretation

1 In this Code -

cured and/or dried meat flesh in whole cuts or pieces means meat flesh including any attached bone containing no less than 160 g/kg meat protein on a fat free basis.

manufactured meat means processed meat containing no less than 660 g/kg of meat.

meat means the whole or part of the carcass of any buffalo, camel, cattle, deer, goat, hare, pig, poultry, rabbit or sheep, slaughtered other than in a wild state, but does not include –

(a) the whole or part of the carcass of any other animal unless permitted for human consumption under a law of a State, Territory or New Zealand; or

(b) avian eggs, or foetuses or part of foetuses.

Editorial note:

This definition of meat does not include eggs or fish, as such foods are regulated in Standards 2.2.2 and 2.2.3 respectively.

The generic Standards in Chapter 1 of this Code apply to foods in Chapter 2, Food Product Standards. In particular, it should be noted that clause 3 of Standard 1.2.4 applies to meat and meat products.

meat flesh means the skeletal muscle of any slaughtered animal, and any attached -

(a) animal rind; and
(b) fat; and
(c) connective tissue; and
(d) nerve; and
(e) blood; and

(f) blood vessels; and
(g) skin, in the case of poultry.

meat pie means a pie containing no less than 250 g/kg of meat.

offal means those parts of the carcass such as blood, brain, heart, kidney, liver, pancreas, spleen, thymus, tongue and tripe, but excludes meat flesh, bone and bone marrow.

processed meat means a meat product containing no less than 300 g/kg meat, where meat either singly or in combination with other ingredients or additives, has undergone a method of processing other than boning, slicing, dicing, mincing or freezing, and includes manufactured meat and cured and/or dried meat flesh in whole cuts or pieces.

sausage means meat that is minced, or comminuted meat or a combination thereof, which may be combined with other foods, encased or formed into discrete units, but does not include meat formed or joined into the semblance of cuts of meat.

ready-to-eat meats (NZFSA definition, not part of Food Standards Code): Ready to eat meat that is:

Fermented (whether cooked or uncooked, whether whole, shaved or diced and whether packed or unpacked); or

Cooked and manipulated post cooking (eg sliced, shaved), whether packed or unpacked, whether whole or not; and includes pates, dried meat, slow cured meat, luncheon meat, and cooked muscle meat (eg ham. roast beef etc)]

4.6.3 Compositional requirements

1 Not applicable.

2 Limit on fluid loss from thawed poultry

Frozen poultry when thawed must yield no more than 60g/kg of fluid as determined by the method prescribed in the Schedule.

3 Composition of sausage

Sausage must contain -

(a) no less than 500g/kg of fat free meat flesh; and

(b) the proportion of fat in sausage must be no more than 500g/kg of the fat free meat flesh content.

4.6.4 Information requirements

4 Declaration of the presence of offal in food

(1) The presence of brain, heart, kidney, liver, tongue or tripe in a food, must be declared in accordance with subclause 4(3), either by the -

(a) class name offal; or

(b) specific type of offal.

(2) Subject to subclause (3), offal other than those specified in subclause (1) is prohibited to be present in food.

(3) Offal, otherwise prohibited in this Standard to be present in food, is not prohibited if the specific name of the offal present in the food -

(a) is declared on the label; or

(b) where the food is not required to bear a label, is otherwise declared to the purchaser.

5 Mandatory fat declaration where a reference is made to the fat content of minced meat

Where express or implied reference is made in relation to the fat content of minced meat, the maximum proportion of fat in the minced meat, expressed in g/100g, must be -

(a) declared on the label on package of the food; or

(b) where the food is not required to bear a label -

(i) displayed on or in connection with the display of the food; or

(ii) provided to the purchaser upon request.

6 Information required in relation to raw meat joined or formed into the semblance of a cut of meat

Where raw meat which has been formed or joined in the semblance of a cut of meat using a binding system without the application of heat, whether coated or not, a declaration that the meat is either formed or joined, in conjunction with cooking instructions indicating how the microbiological safety of the product can be achieved –

(a) must be included in the label; or

(b) if the food is not required to be labelled, must be provided to the purchaser.

7 Inspection brands

(1) Colourings permitted in Standard 1.3.1 may be applied to the outer surface of meat as a brand for the purposes of inspection or identification.

(2) The presence of colourings applied to the outer surface of meat as a brand for the purposes of inspection or identification in accordance with subclause (1), is not required to be declared on the label on a package containing such a food.

8 Labelling of fermented comminuted processed meat

(1) The following names are prescribed for fermented comminuted processed meat -

(a) in the case of fermented comminuted processed meat which has not been heat treated or cooked -

'fermented processed meat - not heat treated'; and

(b) in the case of fermented comminuted processed meat which has been heat treated

'fermented processed meat - heat treated'; and

(c) in the case of fermented comminuted processed meat which has been cooked -

'fermented processed meat - cooked'.

(2) If the label on a package containing fermented comminuted processed meat has a trade name, that trade name must have in association therewith, the following word or words-

(a) in the case of fermented comminuted processed meat which has not been heat treated or cooked -

'fermented';

(b) in the case of fermented comminuted processed meat which has been heat treated

'fermented heat treated'; and

(c) in the case of fermented comminuted processed meat which has been cooked -

'fermented cooked'.

(3) Except as specified in subclause (1) and subclause (2), the label on a package of fermented comminuted processed meat must not refer to any heating process, unless the heating process is a cooking instruction for the consumer.

9 Labelling of fermented comminuted manufactured meat

(1) The following names are prescribed for fermented comminuted manufactured meat

(a) in the case of fermented comminuted manufactured meat which has not been heat treated or cooked -

'fermented manufactured meat - not heat treated'; and

(b) in the case of fermented comminuted manufactured meat which has been heat treated -

'fermented manufactured meat - heat treated'; and

(c) in the case of fermented comminuted manufactured meat which has been cooked -

'fermented manufactured meat - cooked'.

(2) If the label on a package containing fermented comminuted manufactured meat has a trade name, that trade name must have in association therewith, the following word or words -

(a) in the case of fermented comminuted manufactured meat which has not been heat treated or cooked -

'fermented'; and

(b) in the case of fermented comminuted manufactured meat which has been heat treated –

'fermented heat treated'; and

(c) in the case of fermented comminuted manufactured meat which has been cooked -

'fermented cooked'.

(3) Except as specified in subclause (1) and subclause (2), the label on a package of a fermented comminuted manufactured meat must not refer to any heating process.

Editorial note:

Subclause 8(3) and subclause 9(3) prevent the use of word 'pasteurised' or any word of similar meaning on the label of a fermented comminuted processed meat product or a fermented comminuted manufactured meat product.

10 Unpackaged fermented comminuted manufactured meat and fermented comminuted processed meat products

Where a fermented comminuted manufactured meat or a fermented comminuted processed meat product is offered for sale other than in a package, the prescribed name of the food must be displayed in connection with the food, provided that in the case of –

(a) fermented comminuted manufactured meat which has not been heat treated or cooked; and

(b) fermented comminuted processed meat product which has not been heat treated or cooked;

the words 'not heat treated' may be omitted.

SCHEDULE

Determination of fluid in a package of frozen poultry carcass

Take a double plastic bag of suitable size (approximately 700 mm by 300 mm) and weigh to the nearest gram - called 'A' in the formula.

Place the frozen carcass, still in its wrapping, in the double plastic bag. Without taking the frozen carcass from the double plastic bag, remove its wrapping and any included label. Retain in the double plastic bag any ice formed on the inside of the carcass wrapping or on any included label.

Discard the carcass wrapping and any included label.

Weigh the frozen carcass and the double plastic bag to the nearest half gram - called 'B' in the formula.

Suitably suspend the frozen carcass within the double plastic bag and securely close the neck of the bag around the suspending device. (Sharpened 230mm hooks made from 3mm diameter wire are convenient)

Suspend the frozen carcass and enclosing double plastic bag in an air-space maintained at the temperature of 20 ± 5˚C for a period of 14 to 18 hours.

Open the double plastic bag and, without removing the thawed carcass or allowing any fluid to escape, remove and retain any device securing the legs and extract any giblet contained in the carcass.

Drain excess liquid from the giblet pack into the double plastic bag, remove the giblets and suspend them from a wing of the bird by means of a small wire hook. Retain the empty giblet package.

Ensure that all parts of the carcass can drain freely and securely reclose the neck of the double plastic bag.

Weigh the combined empty giblet package and any leg securing device to the nearest gram - called ‘C’ in the formula.

Drain for a further period of two to four hours. At the end of the period remove the carcass after shaking it to remove any fluid that may be trapped within the bird.

Weigh the double plastic bag and the contents to the nearest gram - called ‘D’ in the formula.

Where there is no edible oil layer in the double plastic bag:

Use this formula to calculate the proportion of fluid:

$$\text{Proportion of fluid} = \frac{D-A}{B-A-C} \times \frac{1000}{1}$$

expressed as g/kg

Where there is an edible oil layer in the double plastic bag -

Carefully pour the contents of the double plastic bag into a centrifuge tube of suitable volume (approximately 250 mL).

Weigh the centrifuge tube and its contents to the nearest gram - called 'E' in the formula.

After centrifugation at 1000 g for 5-10 minutes, remove the edible oil layer with the aid of a pasteur pipette.

Re-weigh the centrifuge tube and its contents to the nearest gram - called ‘F’ in the formula.

Use this formula to calculate the proportion of fluid -

$$\text{Proportion of fluid} = \frac{D-A-(E-F)}{B-A-C} \times \frac{1000}{1}$$

expressed as g/kg

4.7 Standard 2.2.3: Fish and Fish Products

4.7.1 Purpose

This Standard defines the term 'fish' and provides a compositional standard specific to histamine in fish and fish products. This Standard also requires the provision of certain cooking instructions for raw fish which has been joined using a binding system without the application of heat.

4.7.2 Interpretation

In this Code -

fish means any of the cold-blooded aquatic vertebrates and aquatic invertebrates including shellfish, but does not include amphibians and reptiles.

Editorial note:

This Standard does not define specific names for fish.

In Australia, guidance on the specific naming of fish may be found in the Australian Fish Names List, as amended from time to time, which is available from the Seafood Services Australia website at www.seafoodservices.com.au or by contacting Seafood Services Australia on 1300 130 321.

In New Zealand, guidance may be found in the following publications:

(1) clause 32 of the Animal Products (Specifications for Products Intended for Human Consumption) Notice 2004; and
(2) the *Authorised Fish Names Circular* (1995) issued by the New Zealand Fishing Industry Agreed Implementation Standards 004.2 pursuant to Regulation 19 of the Fish Export Processing Regulations 1995; and
(3) the Commerce Commission's booklet titled *Food Labelling, Promotion and Marketing - A Guide for Manufacturers, Importers and Retailers* (1998).

4.7.3 Composition

The level of histamine in fish or fish products must not exceed 200 mg/kg.

4.7.4 Labelling etc of formed or joined fish

Where raw fish has been formed or joined in the semblance of a cut or fillet of fish using a binding system without the application of heat, whether coated or not, a declaration that the

fish is either formed or joined, in conjunction with cooking instructions indicating how the microbiological safety of the product can be achieved –

(a) must be included on the label on the package of the fish; or

(b) if the food is not required to be labelled, must be provided to the purchaser.

Editorial Note:

Circumstances in which food is not required to be labelled are set out in Standard 1.2.1.

The Codex Alimentarius Standards for fish provide histamine levels as indicators for -

1. Decomposition; and
2. Hygiene and handling.

For decomposition, the relevant Standards state -

'The products shall not contain more than 10 mg/100 g of histamine based on the average of the sample unit tested. This applies only to species of *Clupeidae, Scrombridae, Scrombresocidae, Pomatomidae* and *Coryphaenedae* families.'

For hygiene and handling, the relevant Standards state -

'No sample unit shall contain histamine that exceeds 20 mg per 100 g . This applies only to species of the families Scrombridae, Clupeidae, Coryphaenidae, Scrombresocidae and Pomatomidae .'

These Codex Standards cover -

(a) quick frozen fish fillets;
(b) quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh;
(c) eviscerated and uneviscerated quick frozen finfish;
(d) quick frozen fish sticks (fish fingers), fish portions and fish fillets - breaded or battered;
(e) canned sardines and sardine type products; and
(f) canned tuna and bonito.

5 NZFSA Recall Quick Reference Guide

Amendment 1

March 2010

This Quick Reference Guide supports the NZFSA Recall template which may be adopted in whole or in part by food businesses. Additional information and guidance is included in the NZFSA Recall Guidance Note.

5.1 What is recall?

Recall is the isolation and removal of food which has been released from a manufacturer's direct control, and is under the control of others in the storage, distribution, retail, and consumer chain.

There are two levels of product recall. These are:

Recall: This is a removal of unsafe food from the distribution chain and extends to food sold to consumers and therefore involves communication with consumers.

Withdrawal (also known as Trade Recall): This is the removal of an unsafe foodstuff from the distribution chain but does not extend to food sold to the consumer.

5.2 Deciding to recall product

The decision to recall a food is based on there being a risk assessment including:

- identification of a hazard that makes a food unsafe and,
- its likelihood of affecting public health.

To ensure that public health is protected at all times a food business must adopt the precautionary principle in its risk assessment activities. In the context of this document the precautionary principle can be explained as:

Where assessment of available information indicates the possibility of harmful effects on health but scientific uncertainty exists, assume the product presents a risk to human health and take appropriate control action.

5.3 Who has responsibility for recalls?

In accordance with the Food Act and other food legislation, the primary responsibility for the safety and suitability of the food for human consumption is borne by the food industry.

The NZFSA wishes to work with food businesses taking recall action and be satisfied that all reasonable steps are being taken to protect consumers. When a recall is initiated, actions in recalling the food need to be co-ordinated with the NZFSA.

A Health Protection Officer at the local Public Health Unit should be notified as soon as a recall is likely. The NZFSA will provide support and technical advice via the Officer co-ordinating the recall.

Note: The NZFSA/Minister has the ability to initiate a recall and this ability is not limited to matters of food safety. The wording in the Food Act 1981 refers to "for the purpose of protecting the public" giving considerable scope for recall including matters relating to food safety, fraud, and non-compliance with food standards. In most circumstances the need to exercise this legal power will result from the failure of a business to act responsibly.

5.4 Media statements and advertising

When a product has been distributed beyond the warehouses to consumers, there may be a need to advise or warn consumers who have food in their home. This decision should be taken in consultation with the Health Protection Officer at your local Public Health Unit.

In the event of consumer recall, warnings should be placed in the media and at locations where the product has been sold. This may take the form of a media release or paid advertisement in newspapers, on radio or television. The form of media used will depend on the circumstances involved.

The NZFSA recognises that the manufacturer is in a better position to manage recalls and is prepared to take a lesser role provided the business takes up their recall responsibilities in a prompt and informative manner. However, if a business fails to take up this obligation the NZFSA Director will make his own privileged statements. This would result in a statement that informs consumers of the issue from the NZFSA perspective.

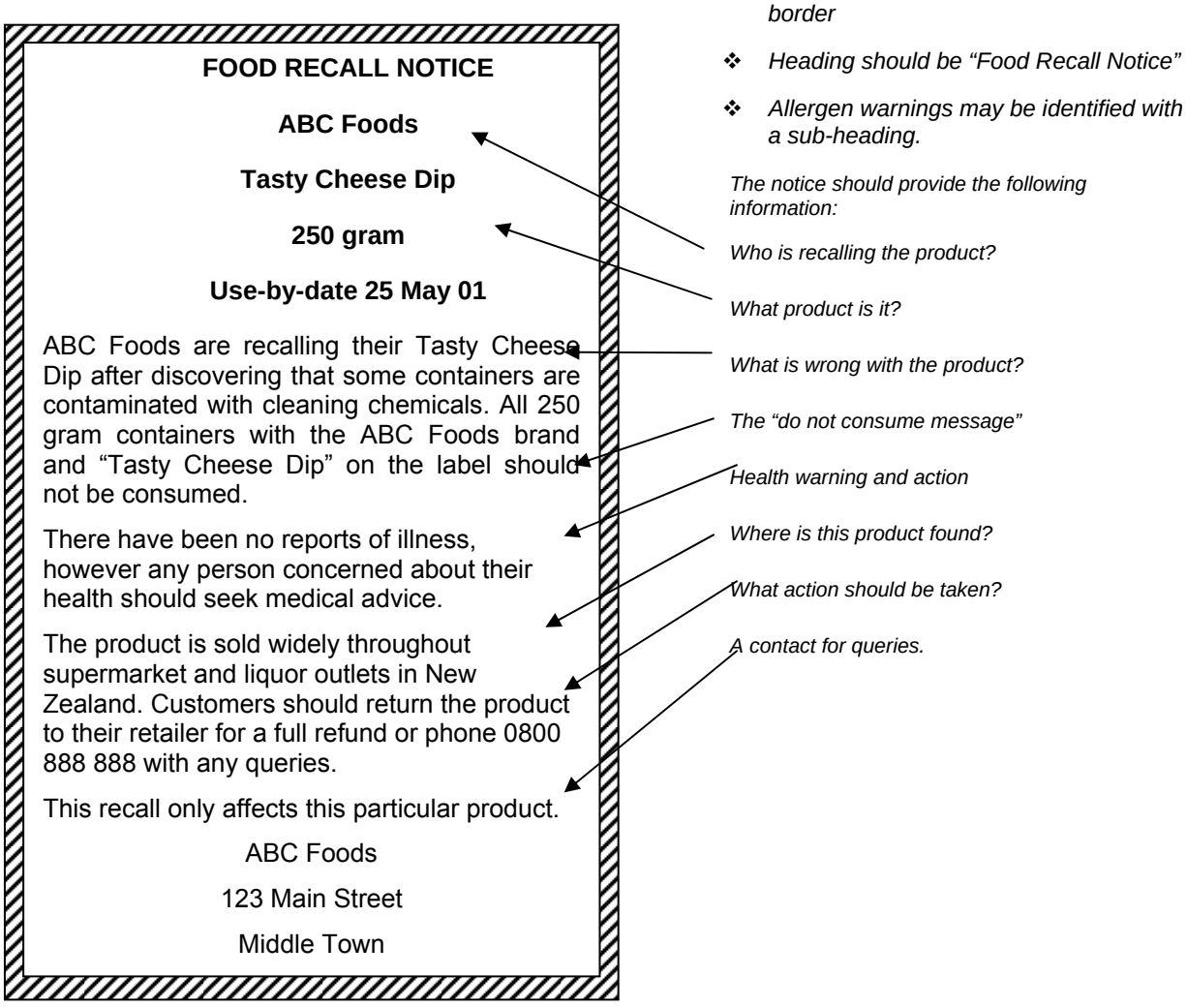
There is a standard format for newspaper adverts that includes the advertisement's size and its content (see Attachment 1).

Circulation lists for a product that is distributed nationally are given in Attachment 2, *Schedule of National Newspapers.*

A single contact can arrange newspaper adverts in some or all of these newspapers, namely: Newspaper Advertising Bureau, Newspaper House, 2nd Floor, 93 Boulcott Street, PO Box 944, WELLINGTON, Ph (04) 472 8365, Fax (04) 471 0987.

Similarly there is a single contact that can arrange radio adverts in some or all of 130 of a possible 138 radio stations nationally: The Radio Bureau, 1st Floor, Hanimex House, Cnr. Victoria & Vivian Streets, P.O. Box 2092, WELLINGTON, Ph (04) 801 9800, Mob (025) 455 700, Fax(04) 384 2899.

Attachment 1: The Features of a Paid Advertisement



Important Points to Note:

- Recall notices should exclude promotional information.

- The company logo may appear in the advertisement but it should not detract any attention from the recall message.
- The advertisement should appear in the main body of the newspaper, not in the classified section.
- Draft advertisements should be submitted to the NZFSA to ensure wording is satisfactory and avoid the NZFSA having to issue their own statement.
- This format should be used for food safety or other NZFSA sanctioned recalls only. If performing a recall for quality or other reasons an alternative format and heading should be used. This is to maximise consumer response when seeing food safety recalls.

Attachment 2: Schedule of National Newspapers[1]

No.	Newspapers
1	Northern Advocate
2	NZ Herald
3	Waikato Times
4	Bay of Plenty Times
5	Rotorua Daily Post
6	Gisborne Herald
7	Taranaki Daily News
8	Hawkes Bay Today
9	Wanganui Chronicle
10	Manawatu Evening Standard
11	Wairarapa Times Age
12	The Dominion Post
13	Nelson Evening Mail
14	Marlborough Express

[1] Please refer to http://www.nzfsa.govt.nz/processed-food-retail-sale/recalls/guidance/index.htm#P318_38289 for more information on recalls.

15	Westport News
16	Greymouth Evening Star
17	Timaru Herald
18	The Christchurch Press
19	Otago Daily Times
20	The Southland Times
21	Sunday Star Times
22	Sunday News

6 Guidelines on the Exclusion of Infected Persons

Amendment 0

January 2005

6.1 Exclusion controls for unspecified vomiting and diarrhoea

Vomiting is an important symptom of a viral or bacterial infection. A food handler who has had an episode of vomiting (in the absence of other obvious causes, eg alcohol poisoning, morning sickness, etc) in the 24 hours prior to starting work must be excluded and the ill person must seek medical advice. The person must tell the doctor that they work as a food handler (the doctor should then arrange for faecal testing).

Diarrhoea may also indicate the presence of an infection *(see also section 6.6 of the exclusion guidelines).*

Anyone suffering from diarrhoea must cease work immediately. If there is only one episode of diarrhoea and no other symptoms such as ongoing nausea, abdominal cramps or fever the person may resume food handling duties again after 24 hours of being symptom free. They should be reminded of the importance of good hand hygiene practice, particularly hand washing and thorough drying. If symptoms persist, the person should seek medical advice. The person must tell the doctor that they work as a food handler (the doctor should then arrange for faecal testing).

Faecal (poo) Testing

It is important that faecal specimens of food-handlers who have been ill are tested if they have had an episode of vomiting or have had two or more episodes of diarrhoea.

There are also some specific illnesses where clearance with faecal specimens is required so it is important to know the identity of the cause of the illness (see next section). Clearance with faecal specimens can be arranged by a doctor or through the local Public Health Unit.

6.2 Exclusion controls for specific illnesses

Organism (Hazard)	Action to be taken (Control)
Campylobacter	Exclude from work until well and without diarrhoea for a period of 24 hours.
Cryptosporidium	Exclude from work until well and without diarrhoea for a period of 24 hours.
Giardia	Exclude from work until well and without diarrhoea for a period of 24 hours.
Hepatitis A	Exclude from work until until cleared by the Medical Officer of Health. *See section 6.3* illnesses requiring special consideration for a discussion on further control measures.
Shigella	Exclude from work until 2 consecutive negative faecal specimens (taken 48 hours apart) have been confirmed.*
Salmonella	Exclude from work until 2 consecutive negative faecal specimens (taken 48 hours apart) have been confirmed.*
Typhoid, Paratyphoid and Cholera	Exclude from work until clearance given by Medical Officer of Health. *See section 6.3* illnesses requiring special consideration for a discussion on further control measures.
VTEC (such as E.coli 0157:H7)	Exclude from work until 2 consecutive negative faecal specimens (taken 48 hours apart) have been confirmed.* The number of organisms needed to cause infection is low and the health implications for high-risk groups such as the elderly, young, pregnant and immuno-compromised can be serious, with some cases resulting in death.
Yersinia	Exclude from work until well and without diarrhoea for a period of 24 hours.
Viruses (such as Norwalk-like virus) - presenting as gastrointestinal illness consisting of diarrhoea, nausea or vomiting	Exclude from work until well and without diarrhoea for a period of 24 hours. Highly infective. Virus particles survive in the environment for long-periods. Seek ***immediate*** advice from the Public Health Unit regarding disinfecting work areas and disposal of potentially contaminated food.

*Specimens should be collected at least 48 hours after the last dose of any antibiotic treatment.

Illnesses that require medical clearance before returning to work. **Negative faecal specimens are required as the organism may still be excreted even after the symptoms have stopped.**

6.3 Illnesses requiring special consideration

6.3.1 Hepatitis A

Anyone either infected, or suspected of being infected with hepatitis A *must be excluded* from food handling for at least seven days after the onset of symptoms. Most adults will experience the sudden onset of an influenza-like illness followed by muscle aches, headache, loss of appetite, abdominal discomfort, fever and jaundice (yellowing of the skin). Advice in all cases should be sought from the Public Health Unit.

A food-handler who is a close personal contact (household, sexual etc) of a person that has hepatitis A must notify their manager. In such cases the food handler should not handle open food until advice is sought from the medical officer of health at the Public Health Unit.

The period of highest infectivity is just prior to and after the onset of symptoms. This presents a risk as an individual will not normally be diagnosed until after the onset of symptoms. In such cases the Public Health Unit will need to assess whether other corrective action may need to be taken in addition to excluding the food handler (eg sanitising work areas and communal facilities, disposing of food where there has been a risk of contamination, and immunising other food handlers or food consumers to reduce their risk of illness). There is often a short timeframe to offer protection so early notification is essential.

6.3.2 Typhoid and Paratyphoid

Anyone suffering from Typhoid, Paratyphoid or Cholera must be excluded.

Investigation and management of people with Typhoid, Paratyphoid or Cholera will normally be carried out by the local Public Health Unit, who will usually require them to be excluded from food handling work until faecal tests indicate that the infecting organism is no longer being excreted.

If food handlers are found to have either Typhoid, Paratyphoid or Cholera they should be excluded from all food handling activities and the local Public Health Unit should be contacted immediately.

6.4 Skin conditions

Food handlers with lesions on exposed skin (hands, face, neck or scalp) that are actively weeping or discharging must be excluded from work until the lesions have healed.

An infection of the fingernail-bed or a boil on the face or other exposed skin, even if covered with a suitable waterproof dressing, will usually be considered grounds for exclusion as a food handler.

In contrast, infected lesions on non-exposed skin, eg: the back or legs, are not an impediment to food handling duties, however the importance of meticulous hand hygiene should be emphasised.

Clean wounds must be totally covered with a distinctively-coloured waterproof dressing but there is no need to discontinue food handling.

6.5 Infections of the eyes, ears, mouth and throat

Any food handler whose eyes, ears, mouth or gums are weeping or discharging must be excluded from food handling until they are better. Those with a persistent sore throat and no other respiratory symptoms such as a runny nose or cough may have a streptococcal throat infection and should be referred to a doctor for assessment.

6.6 Factors not associated with microbiological contamination of food

6.6.1 Non-infective gastrointestinal disorders

Disorders such as Irritable Bowel Syndrome, Crohn's disease or ulcerative colitis are not a barrier to employment as a food handler, even though they may result in diarrhoea. Such workers must be made aware of the need to seek medical advice and notify the manager if any change from their normal bowel habit occurs, as this must be assumed to be infectious until proven otherwise.

6.6.2 Chest and long-term respiratory diseases

Tuberculosis is not spread through food handling. However, the disease may affect an individual's general health so as to make them unfit for work or they may pose a risk of infection to others in the workplace.

Contact the Public Health Unit for more information on this.

6.6.3 Blood borne infections

Infections such as HIV, hepatitis B or C, do not themselves present a risk of food contamination. As long as they are well, there is no reason why people with these infections should not be employed as food handlers.

All blood spills should be treated as if infected and the affected area should be suitably cleaned and sanitised (eg with a diluted bleach solution) and any affected food discarded.

6.7 Public Health Units

For further advice on controlling the risk from infected persons in your food business contact a Health Protection Officer at your local Public Health Unit:

Auckland DHB	Private Bag 92 605	Auckland	(09) 262 1855
Choice Health	Private Box 58	Masterton	(06) 378 9029
Community and Public Health	Private Box 443	Greymouth	(03) 768 1160
Community and Public Health	PO Box 1475	Christchurch	(03) 379 9480
Community and Public Health	Private Box 510	Timaru	(03) 688 6019
Hawke's Bay DHB	PO Box 447	Napier	(06) 834 1815
Health Waikato	PO Box 505	Hamilton	(07) 838 2569
Hutt Valley DHB	Private Bag 31 907	Lower Hutt	(04) 570 9002
MidCentral Health	Private Bag 3003	Wanganui	(06) 348 1775
MidCentral Health	Private Box 2056	Palmerston North	(06) 350 9110

Nelson Marlborough DHB	Private Box 647	Nelson	(03) 546 1537
Nelson Marlborough DHB	Private Box 46	Blenheim (03)	577 1914
Northland DHB	Box 742	Whangarei	(09) 430 4100
Pacific Health	Private Bag 1858	Rotorua	(07) 349 3520
Pacific Health	PO Box 2121	Tauranga	(07) 571 8975
Pacific Health	PO Box 241	Whakatane	(07) 306 0720
Public Health South	PO Box 5144	Dunedin	(03) 474 1700
Tairawhiti District Health	PO Box 119	Gisborne	(06) 867 9119
Taranaki Health	Private Bag 2016	New Plymouth	(06) 753 7798

7 Aseptic Sampling (MIRINZ Manual 873)

Amendment 0

January 2005

7.1 Aseptic techniques

When sampling for microbiological analysis, it is important that aseptic techniques are used. The objective of aseptic sampling is to ensure that the bacteria identified as coming from the area sampled could have only come from that sample and could not have been contaminated by bacteria from hands, clothing, utensils, sampling equipment or packaging, or any other contact surface in the general environment. This also applies to how the sample is kept and transported to the laboratory.

Remember that when swabbing, care must be taken not to expose the swab to the environment for too long. The swab must not touch any surface other than that which is to be examined. The swab must not touch hands or other parts of the body or clothing. All equipment used for sampling must be sterile, e.g. swabs, sponges, diluent, containers.

When swabs are used, a suitable medium (see below for diluent) for transport to the laboratory is essential to avoid them drying out. If sponges are used they must have been supplied by a laboratory that has established that the sponge is of a suitable material that has no bactericidal or bacteriostatic effect. Sponges or pads must be handled either using sterile gloves or by using sterile forceps. A new pair of sterile gloves or separate sterile forceps should be used for each sample collected.

7.2 Swabbing for L. monocytogenes

Sponges, pads or swabs approved by the laboratory carrying out the analysis may be used. Small stick swabs (e.g. cotton buds) shall not be used.

7.3 Swabbing procedure for plating

1. Sanitize hands with an appropriate sanitizer (e.g. 70% alcohol), then air dry. Alternatively, wear disposable gloves.

2. Aseptically open the sterile swab.

3. Moisten the swab with the sterile diluent.

4. Holding the swab, rub the swab vigorously using one side first, then the other, over the large surface area to be tested.

5. Place the swab into a sterile container (e.g. a sterile plastic bag).

6. After sampling, label the container clearly.

7. Transport to laboratory within 24 hours at 5 degrees C.

7.4 Diluent formulae

Peptone	1.0 g
10% sodium thiosulphate solution	5.0 ml
Tween 20	10.0 g
Distilled water to	1000 ml.

8 *Listeria Monocytogenes* Fact Sheet

Amendment 0

January 2005

This is an abbreviated version of a fact sheet prepared for the Ministry of Health by ESR Ltd. (Issued May 2001). It is a guide only.

8.1 The organism

While disease caused by this organism is uncommon, the clinical consequences are often serious. Two forms of disease are now recognised; a serious invasive disease and a non-invasive gastroenteritis. It grows at refrigeration temperatures in the presence or absence of air.

8.2 Growth and its control

8.2.1 Growth

Temperature: Optimum 37°C, range -1.5 to 45 °C.

pH: Optimum 7.0, range 4.4-9.4.

Atmosphere: Grows optimally under microaerophilic conditions but grows well both aerobically and anaerobically. Can grow in relatively high (e.g. 30%) CO_2, but is inhibited under 100% CO_2. Growth was not retarded by a 5-10% CO_2 atmosphere.

Water activity: Minimum aw permitting growth = 0.92 (α11.5 % NaCl). Will grow in media containing up to 10% NaCl.

8.2.2 Survival:

Temperature: Survives freezing very well.

Atmosphere: Not influenced by atmosphere.

8.2.3 Inactivation (CCPs and hurdles):

Temperature: Rapidly inactivated at temperatures above 70°C.

pH: Inactivated at pH values less than 4.4 at rates depending on the acidulant and temperature. Organic acids, such as acetic, are more effective than mineral acids (e.g. hydrochloric). Inactivation proceeds faster at higher temperatures.

Water activity: Can remain viable in dry environments for long periods.

Preservatives: (NB: Some of the preservatives discussed here may not be permitted in New Zealand). Inactivated on vegetables by lysozyme (100 mg/kg), 0.2% sodium benzoate at pH 5, 0.25-0.3% sodium propionate (pH 5, less effective at lower temperatures), and 0.2-0.3% potassium sorbate (pH 5.0).

The addition of nitrite to salami-type meat batter minimally affected survival of the organism at 37°C (pH was the primary factor).

The use of appropriate starter cultures results in the elimination of the organism from salami.

In other meats at around pH 6-6.3, nitrite (70-140 ppm) did retard growth, and sodium ascorbate (0.042%) in combination with the nitrite retarded growth further. Ascorbate had no effect in the absence of nitrite.

Lactate and ALTA 2341 (shelf life extender) lengthened lag times in poultry but effectiveness decreased as temperature increased.

Inhibited by 100 ppm monolaurin or 1000 ppm eugenol.

Sanitisers/Disinfectants: (These products must be used as advised by the manufacturer).

8.3 The Illness

There are two types of disease associated with the organism; invasive and non-invasive. The invasive disease normally occurs in people with weakened immune systems, while the non-invasive disease can occur in anyone if a high number of *L. monocytogenes* cells is consumed.

Incubation:

Invasive: 1-90 days, mean 30 days.

Non invasive: 11 hours to 7 days, median 18 hours.

Symptoms:

Invasive: Include 'flu'-like symptoms (e.g. fever, headache), diarrhoea, vomiting, meningitis, septicaemia, spontaneous abortion.

Non-invasive: Diarrhoea, fever, muscle pain, headache, and less frequently with abdominal cramps and vomiting. Attack rate reported to be 74%.

Condition:

Invasive: Listeriosis. A mortality rate of approximately 30% is associated with the disease. Hospitalisation rate: 92%.

Non-invasive: Has been termed non-invasive febrile gastroenteritis.

Toxins: No toxins are produced in foods.

At Risk Groups:

Invasive: Those at risk include pregnant women and their foetuses, new born children, the elderly and those with compromised immune systems, e.g. AIDS patients.

Non-invasive: Will affect anyone consuming high numbers of cells.

Long Term Effects: In one outbreak neurological problems (cranial nerve palsies) developed in 30% of the survivors of meningitis. Pre-term infants may suffer from excess fluid in the brain, requiring surgery, and partial paralysis.

Dose:

Invasive: The estimate of the number of cells that need to be ingested to cause disease is 100-1000 cells are normally required.

Non-invasive: Outbreaks have been attributed to foods containing >105 cells/g, and in one case the median consumption of cells was estimated to be 1011.

NZ Incidence: In 1999 there were 18 cases of invasive listeriosis with 17 in the previous year. This incidence is 0.5 cases/100,000/year.

8.4 Sources

Human: *L. monocytogenes* is carried asymptomatically in the faeces of 2-6% of the population. Person-to-person spread (other than mother to foetus) not often recorded but has been recognised. Up to 30% of case contacts may carry the organism. Is shed in high numbers (≥ 104/g) in the faeces of infected people.

Animal: Can cause disease In animals, and veterinarians were originally considered to be the at risk group. *Listeria* present in animal faeces can contaminate red meat. Improperly made silage can be a source of domestic animal infection.

Food: Should be considered as potentially present in all raw foods and ingredients. May be present in cooked foods as a result of post-cooking contamination. Risk posed is likely to be greatest in ready-to-eat cooked foods with long shelf lives. Has been isolated from a wide variety of ready-to-eat and raw foods in NZ studies.

Environment: Is widespread in the environment including soil, vegetation, water and sewage. Has been isolated from toothbrushes and other domestic environments.

Transmission Routes: One study estimates that 1/3 of cases are foodborne.

9 Possible sources of *Listeria monocytogenes* in Ready-to-Eat Products

Amendment 0

January 2005

Adapted from information given out at FSIS Listeria Workshops for Small and Very Small Plants

9.1 Introduction

Listeria monocytogenes is found in the environment and can easily be transferred to products via contaminated materials, equipment or personnel. This is undesirable especially in the post-cook area as ready-to-eat products will not be subject to further controls to kill off any *Listeria*. It is therefore essential to know where *Listeria* comes from and how it can be transferred to product.

9.2 Possible sources in processing environment

Raw materials and or ingredients

Improper separation or raw and cooked products:

- Cross contamination
- Shared equipment and maintenance tools
- Product storage
- Product pathways
- Product handling

Improper personnel traffic patterns and practices

- Employee practices when moving from raw to cooked areas
- Non-employee traffic (e.g. contractors, visitors)

- Improper personnel hygiene (e.g. working with raw and cooked product at the same time, clothing, hygienic practices)

Improper cleaning:

- Complex equipment or
- Improper use of cleaning compounds and sanitisers (wrong kinds or amounts)
- Using same tools to clean raw and cooked areas
- Improper cleaning of known harbourage areas (see 9.3)

Airflow / aerosols (improper air flow through the exposed product area)

Construction / maintenance

Brine / water reuse programmes

9.3 Possible harbourage sites in post cook area

Casing peelers

Shelves and racks

Lugs, tubs, pans and containers

Hand tools, gloves and aprons

Packaging materials

Packaging equipment

Conveyors, belts (including underneath) and rollers

Sponges, squeegees and brushes for cleaning

Chutes

Cutting boards

Dicers, shredders and slicers (hooks, blades, bearings, belts, hoppers)

Saws (blade, wheels, bearings, tables)

O-rings and O-ring grooves

Maintenance tools (wrenches, screwdrivers)

Floors and drains

Standing water (e.g. condensation drip trays), water collection spots

Refrigeration condensation units

Evaporator coils

Rubber hoses (especially where perished and/or come in contact with the floor)

Condensate mops

Ceilings and overhead pipes and rails

Wooden pallets or any other wooden item (e.g. implement handles)

Fork lifts, pallet jacks, carts / truck-wheels, hubs and fenders

Employee boots

Any recess or hollow material such as rollers, switch boxes, box cutters, motor housings, beams, legs, supports

Tables (including legs, edges and underside)

Door seals, jambs, gaskets, hinges, latches, handles and door pulls

Inadequately sealed surface panels

Vacuum / air pressure pumps, lines and hoses

Ice makers

Open bearings or bolt threads and exposed threaded connections

Equipment hanging over products

Air filters, handlers, fans, vapor exhaust chutes

Compressed air systems

Oven exterior

Room exterior

Telephones and key pads

10 Procedure for Determining Weight Loss

Amendment 0

January 2005

Make sure your scales are accurate and that they are precise enough (should at least weigh each gram and preferably 0.1 of a gram).

Weigh a representative sample. 10 items should be enough.

Tie a label on each item and write the starting weight and date on it.

Each time you weight the item, write the new weight and date on the label.

Do not average the 10 weights.

Keep each individual weighing – this will tell you how variable your process is. If there is too much variability so that some items are too wet to be released, you will need to find out why there is uneven drying and fix it.

Record and retain the results as part of your verification.

When writing the weight loss achieved by your process into your RMP use either the worst case (lowest weight loss) or report the average and standard deviation.

11 Examples of Records

Amendment 0

January 2005

The following attached examples of records may be useful if you don't already have your own records that capture the same information.

- Pre-operational Checklist
- Additive Control Record (CCP1)
- Fermentation and Maturation Record (CCP2)
- Drying Record (CCP3)
- Cooking Record (CCP4)
- Cooling Record (CCP5)
- Unregulated Meat Record
- Corrective Action Record

These records may be adapted to suit the individual operations.

Alternatives to these records are acceptable.

Recording the information on the pre-operational checklist is recommended but not mandatory although the butcher should at least record any problems and the corrective action taken.

The CCP records are VERY IMPORTANT and this information must be captured somehow if you do these process steps.

Not all of the sections on the Unregulated Meat Record will apply to every butchery as some butchers will not be slaughtering or humane slaughtering. Cross out those sections that are not applicable.

Records that are used must be listed on your RMP document list (section 4 of the RMP). Add the names and numbers of the records once you have set them up.

Pre-operational Checklist

Record No:

✓ if satisfactory

Week Commencing: ……/…../…..

X if unsatisfactory and complete corrective action column

PRE_OPERATIONAL CHECK	DAY							
The following are clean and in good repair	**M**	**T**	**W**	**T**	**F**	**S**	**S**	**Corrective Action**
Processing room ceilings and walls								
Processing room floors and drains								
Work benches								
Tubs and other containers								
Racks, rails								
Smokehouse								
Knives and other utensils								
Saws								
Processing equipment								
Chopping block								
Hand basins (with soap and clean towels)								
Freezers								
Chillers								
Retail area								
Storage areas								
Amenities								
Delivery vehicles								
The following are operating at correct temperature	**M**	**T**	**W**	**T**	**F**	**S**	**S**	**Corrective Action**
Freezers (-12˚C or cooler)								
Chillers (+ 5˚C or cooler)								
Display cabinets (+ 5˚C or cooler)								

Additive Control Record (CCP1) Record No.:

Limits: See Food Standards Code 1.3.1 (This is given in section 4.4 of the Resource Manual).

Date	Batch no.	i) Product type ii) Additive type	Weight of additive (g)	Weight of meat (g)	Resulting additive level	Corrective action
		i) II)				
		i) II)				
		i) II)				
		i) II)				
		i) II)				
		i) II)				
		i) II)				
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		i) II)				
		i) II)				
		i) II)				
		i) II)				

Fermentation and Maturation Record (CCP2) Record No:

Limits: See Attachment P 3.12.

Date	Batch no.	Product type	i) Fermentation time ii) Temp (˚c)	Relative Humidity	i) Maturation time ii) Temp (˚c) iii) pH	Corrective action
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	
			i) II)		i) ii) iii)	

Drying Record (CCP3) Record No.:

Limits: See Attachment P 3.13.

Date	Batch no.	Product type	Product weight (g)	i) Drying time ii) Temp (˚c)	i) Weight loss ii) Moisture content iii) Water activity	Corrective action
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	
				i) ii)	i) ii) iii)	

Cooking Record (CCP4) Record No.:

Limits: One of following combinations of deep meat temperature (°C) and cook time (minutes):

65°C, 10 minutes 66°C and 7 minutes 67°C and 6 minutes 68°C and 4 minutes
69°C and 3 minutes 70-72°C, 2 minutes 73°C and above, 1 minutes

Date	Batch no:	Product	Time at internal temp (mins)	Internal temp (˚c)	Corrective action

Cooling Record (CCP5) Record No.:

Limits: Uncured product down to 12°C in 6 hours and to 5°C in maximum of 8 hours.
Cured product down to 12°C in 7.5 hours and to 5°C in maximum of 10 hours.

Date	Batch no:	Product	Internal temp (˚c)	Cooling time (hours)	Corrective action

Unregulated Meat Record

Record No.:

Information Required - General	Details
Date the service was provided	
Approximate amount/type/quantity and origin of the animal material received (No. of carcasses is adequate)	
Animal material/product returned to the animal owner or hunter	
What has happened to the non-edible parts of the animal, such as the hide, that is permitted to be traded	
Information Required - Slaughterers	**Details**
Date the service was provided	
Name, address and phone number of the animal owner	
Animal species, sex and approximate age	
Any distinguishing marks	
What homekill material/product (including the hide) was delivered and to whom	
Information Required – Humane Slaughterers	**Details**
Date the service was provided	
Location	
Reason for slaughter	
Distribution of the animal material	
Name and address of the animal owner (if known)	
Information Required - Processors	**Details**
Date the service was provided	
Name, address and phone number of the animal owner	
A description of the homekill or recreational catch received including animal species	
What homekill material/product (including the hide) was delivered and to whom	
Identification used for this animal (to distinguish from that belonging to another owner)	
Information Required – Hides and Skins	**Details**
Hides and skins received / Animal Species / Date	
Hides and skins sold / Date	
Name and address of the purchaser	

NB: Where data is provided by other persons, the butcher records the information if he/she believes it is accurate to the best of their knowledge, but is not otherwise liable for the accuracy of the information.

Corrective Action Record

Record No.:

Date	Problem	Corrective action (include "quick fix", product disposition and "long-term fix" (to prevent it happening again)