

PAPER 3:

FOOD CONTROL PLANS

Introduction

This is Paper 3 in a Review of government involvement in the domestic food sector.

The Review is a significant long-term project that is likely to run over at least five years. Its purpose is to put in place a food regulatory programme across all sectors of New Zealand's domestic food industry that promotes and delivers safe and suitable food in New Zealand.

This is only the second time in the last 30 years that the government's role in the New Zealand domestic food sector has been critically examined at official level. The last review was undertaken in the late 1980s, and led to the Food Amendment Act 1996 (and insertion of the provision for voluntary food safety programmes) and eventually the establishment of the New Zealand Food Safety Authority (NZFSA).

This Paper seeks to generate discussion on proposals for a core regulatory tool, namely the 'Food Control Plan' and policy principles that can underpin the development of such plans in the future. The Paper has been developed by the New Zealand Food Safety Authority (NZFSA) in conjunction with groups representing Public Health Units (who are part of District Health Boards) and Territorial Authorities (as represented by Local Government New Zealand).

Other Papers in the series include:

- Paper 1: Introduction and context
- Paper 2: Regulatory roles, responsibilities and structures
- Paper 4: Implementation of Food Control Plans.

At the end of public consultation on all of the Papers, NZFSA will analyse all submissions and provide policy advice to Government.

Submissions are sought from interested people and organisations on the draft policy principles. A response form is provided, but submissions will be accepted in any format.

The closing date for submissions is 31 December 2004.

Submissions should be sent to:

Submissions – Domestic Food Review
c/o Policy Group
New Zealand Food Safety Authority
PO Box 2835
WELLINGTON
Email: robbie.thomson@nzfsa.govt.nz
Fax: (04) 463 2501

The discussion document will be available on the NZFSA website www.nzfsa.govt.nz/policy-law/projects/domestic-food-review/index.htm. Following analysis of submissions, a summary of issues raised will be made available on the above website.

All submissions are subject to the Official Information Act 1982, which specifies that information is to be available unless there are grounds for withholding it. If you wish your submission or any part of it to be withheld, please indicate the grounds within the Official Information Act that apply. NZFSA will take your request into account when determining whether or not to release information. Please note that any decision by NZFSA to withhold information is reviewable by the Ombudsman.

Executive Summary

The current legislative base for the New Zealand food regulatory programme requires those who operate in the food industry to manage food safety and suitability in different ways, depending on which legislation covers which particular sector. Across the legislation, various core tools are employed, mainly risk-based management plans (such as risk management programmes, product safety programmes, food safety programmes) or prescriptive lists of requirements (such as the Food Hygiene Regulations). These different approaches all have characteristics appropriate to their particular sectors, but it is considered desirable to standardise, harmonise and simplify these – that is, to rationalise them.

The proposed rationalisation of food safety tools requires that:

- common and agreed objectives be defined for all risk-based management plans
- the risk-based plans be brought together in a way that is simple, practical, efficient, effective and broadly applicable across the food chain.

This Paper proposes that in the future, 'Food Control Plans' will be the basic core component of New Zealand's food regulatory programme. The term 'Food Control Plans' is used throughout this Paper to reflect the intended standardised approach.

The Paper discusses the proposed rationalisation approach; the content, application, operation and implementation of Food Control Plans; and a series of principles that are proposed to underpin Food Control Plans.

Purpose of the Paper

The purpose of this paper is to:

- discuss the future of risk-based management plans and a proposed move to rationalise these and move to Food Control Plans
- discuss the role of Good Operating Practice and Hazard Analysis and Critical Control Point (HACCP) analysis in future Food Control Plans
- identify the application and approaches to be undertaken in developing Food Control Plans and their implementation and operation
- outline the proposed content of Food Control Plans.

Scope

Inclusions

The scope of this paper extends to all those food safety and suitability elements intended to be the responsibility of those who operate in the food sector and which are currently covered by regulatory requirements such as the Food Hygiene Regulations or by risk-based management plans. This covers the activities and operations of food producers, processors, manufacturers, transporters, traders or importers in New Zealand, otherwise referred to as 'persons'.

A glossary of terms is provided in Paper 1, but for clarity a number are described here as being particularly relevant to the scope of this paper.

‘Food’ covers both human food and animal feed (including pet food) and related products (e.g. animal by-products, raw materials, food packaging and containers) as well as agricultural compounds and veterinary medicines where appropriate.

‘Food safety’ means all aspects of food hygiene that contribute to the production, processing, distribution, storage and sale of safe food.

‘Suitability’ covers product attributes that include aesthetic characteristics or defects, composition and labelling, that are not related to food safety.

‘Persons’ as referred to in this paper means all food producers, processors, operators, businesses, sellers and importers.

Exclusions

This Paper (and the Review) excludes consideration of non-food safety and suitability related Government involvement such as business related controls and requirements (taxation, local government by-laws, fair trading, etc.) and of export requirements. However, it is noted that product destined for export is often sold in New Zealand, and that export processes are often integral with processes applying to food that is sold in New Zealand.

Background

The current legislative base for the New Zealand food regulatory programme requires ‘persons’ to manage food safety and suitability in different ways, depending on which legislation covers the sector.

The primary legislation that is administered by NZFSA, that deals with the safety and suitability of domestic food is:

- Food Act 1981
- Dairy Industry Act 1952
- Animal Products Act 1999
- Agricultural Compounds and Veterinary Medicines Act 1997
- Wine Act 2003.

Across the legislation, various core control tools are employed: risk management programmes (Animal Products Act), product safety programmes (Dairy Industry Act), food safety programmes and the Food Hygiene Regulations (Food Act). These different approaches all have characteristics appropriate to their particular sectors, but it is considered desirable to standardise, harmonise and simplify these. Inherent in this standardisation, harmonisation and simplification is that aspects of current tools will be modified; therefore, industry-specific developments will continue as the Review progresses.

A proposed rationalisation of food-safety tools requires that:

- common and agreed objectives be defined for all risk-based management plans
- the risk-based plans be brought together in a way that is simple, practical, efficient, effective and broadly applicable in a variety of forms across the food chain.

To do this, NZFSA is reviewing the current approaches used by ‘persons’ to meet requirements of safety (controlling the hazards in food) and suitability (product attributes such as aesthetic defects, composition and labelling that are not related to food safety) and to provide a common approach to food control.

While the current risk-based management programmes have delivered significant benefits, a number of problems are evident. Some relate to the scope and application of plans, while others result from resourcing and implementation issues.

The key problems are:

- the application of risk-based management plans is not consistent
- the legislative base is complex, contains gaps and creates overlaps.

The cost of developing plans has generally been higher than anticipated, and there has been a limited number of experts available to assist. Current requirements for managing the safety and suitability of food are not always practical, are overly complex for some situations, and are inconsistent in their impact on businesses.

More specific problems with the food regulatory system generally were identified and described in “Paper 1: Introduction and Context”. These are included in Appendix A to this Paper.

Proposals for Future Food Control Plans

It is intended that in the future, ‘Food Control Plans’ will be the basic core component of New Zealand’s food regulatory programme. This is already the case in sectors where risk-based management plans are applied.

A number of Principles are proposed for reviewing the approach to risk-based management plans and moving to Food Control Plans. At the highest level (and in many cases this has already occurred) the Government needs to decide whether regulatory control is necessary. General guidance for making such decisions is set out in the Government’s Code of Good Regulatory Practice.¹ It requires that policymakers consider and balance the issues of efficiency, effectiveness, transparency, clarity and equity in deciding whether and how to intervene.

It must then be decided whether control through Food Control Plans is necessary for particular ‘persons’ in the production-to-consumption continuum, or whether alternative regulatory controls (such as broader national or regional control programmes) might be more appropriate and cost-effective in particular. This is described in Figure 1 below.

Figure 4: Options for regulatory response



Food Control Plans are intended to supersede the Food Hygiene Regulations under the Food Act 1981 as well as all current risk-based management plans, namely:

¹ Available on the Ministry of Economic Development’s website (www.med.govt.nz/buslt/compliance/regprac.html)

- food safety programmes under the Food Act 1981
- product safety programmes under the Dairy Industry Act 1952
- risk management programmes under the Animal Products Act 1999
- wine safety management programmes under the Wine Act 2003.

The impact of this change on existing programmes will vary. The intention is to modify existing programmes as necessary over time, rather than starting over and losing improvements that have already been made. Accordingly, many facets of this Review will be familiar to businesses and industries that have food safety programmes, product safety programmes and risk management programmes in place. The key impact is likely to be on food businesses that have not yet developed risk-based management programmes.

Food Control Plans – relevance of underpinning Principles from Paper 1

The underpinning Policy Principles set out in *Paper 1: Introduction and Context* are directly relevant to this paper (and are reproduced in Appendix C). Two Policy Principles are particularly worth noting.

The first is that NZFSA will continue to apply the three-tier 'Regulatory Model', comprising three distinct players: the regulator (primarily but not exclusively NZFSA), the auditor or verifier, and the 'person' with the plan.

In the Regulatory Model, NZFSA as the regulator is ultimately accountable for food control in New Zealand; sets regulatory requirements; and provides implementation tools that cover safety of food, suitability of food and other aspects of the food regulatory programme, such as regulatory requirements for food-related products and official assurances for export of foods.

The second Policy Principle of direct relevance requires that 'persons' take responsibility for producing safe and suitable food. This is intended to underline the importance of safety and suitability being 'built in' to individual businesses and Food Control Plans, rather than being the responsibility of others. That is, 'persons' are not expected to rely on regulators to ensure they deliver safe food, but to take that responsibility themselves.

NZFSA as the regulator would set regulatory requirements (where appropriate), and develop or assist in the development of guidelines, Codes of Practice and other implementation tools. At present, Codes of Practice are generally voluntary documents and it is intended that they will continue to be voluntary. NZFSA proposes to have a process whereby Codes of Practice and other implementation tools (e.g. models or templates for Food Control Plans) can be approved or recognised, so that 'persons' will know these are a good basis for their Food Control Plans if they choose to use them. NZFSA would clearly define approval processes, monitoring provisions and the various actions to be taken when requirements are either not met or do not deliver the expected result. These issues are covered in other Papers.

Food Control Plans – extent of application

As the core control mechanism, Food Control Plans in some form are intended to cover all aspects of the production, processing, distribution, storage and sale of safe food in New Zealand.

In the future, it is proposed that every 'person' will operate a Food Control Plan unless an adequate alternative mechanism – either regulatory (e.g. a national programme) or non-regulatory (e.g. education) – is in place. Forms of Food Control Plans may include, for example, a relatively simple checklist to be used

in particular circumstances for very small businesses (such as by itinerant food sellers) through to the very large and complex plans that might cover large manufacturing businesses.

Food Control Plan Principle 1: All 'persons' will have and implement a documented Food Control Plan unless agreed alternative mechanisms are in place.

Food Control Plans are intended to cover safety and suitability, which together comprise food hygiene. Food hygiene is defined as 'all conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain'². In most situations, this will be achieved by Food Control Plans as specified by NZFSA.

Food Control Plan Principle 2: Food Control Plans will cover all relevant safety and suitability issues.

The regulator will define the requirements that are essential or significant for food safety and suitability. These will be based on a body of experience, science and risk assessments. If a business wants to do something different, it can propose alternative methods to meeting requirements for agreement by NZFSA.

Most food safety and suitability issues would generally be covered within Good Operating Practice (see description below).

Approaches to Food Control Plans – Good Operating Practice and HACCP

It is proposed that two approaches must be undertaken in developing Food Control Plans:

- application of Good Operating Practice followed by
- application of Hazard Analysis and Critical Control Point (HACCP) principles.

Good Operating Practice (GOP)

Good Operating Practice covers all aspects of good practice relevant to food. Good Operating Practice is therefore intended to encompass terms such Good Agricultural Practice, Good Hygienic Practice and Good Manufacturing Practice currently used across various industries. Some aspects of the Food Hygiene Regulations are Good Operating Practice. It is intended that the Food Hygiene Regulations would be repealed and replaced with requirements for Good Operating Practice.

Good Operating Practice generally consists of activities that a 'person' carries out to ensure the safety and suitability of food. Good Operating Practice may be presented as guidelines, included in Codes of Practice or set by the regulator. Good Operating Practice covers procedures and guidelines that are based on experience and practice, including food-related processes and the food processing environment. This is illustrated in Figure 2.

² Codex General Principles of Food Hygiene. Available from Codex Alimentarius Commission website: (www.codexalimentarius.net)

Figure 5: Scope of Good Operating Practice



In preparing a Food Control Plan, Good Operating Practice should be considered first and will provide the basis for the Food Control Plan.

It is proposed that Good Operating Practice cover the following key elements:

1. Each Good Operating Practice system should control or assist in controlling a food safety hazard or food suitability issue, and cover such matters as training.
2. Where possible, Good Operating Practice should be science-based.
3. Good Operating Practice systems should be relevant to the food type and food process.
4. Good Operating Practice systems should be documented and follow these headings:
 - purpose
 - scope
 - authorities and responsibilities
 - materials and equipment
 - actual procedure (including monitoring, corrective action and internal verification)
 - recording and reporting.
5. Good Operating Practice should be developed and documented prior to applying the Hazard Analysis and Critical Control Point (HACCP) principles.
6. Good Operating Practice should be reviewed in conjunction with applying HACCP principles.

Some aspects of Good Operating Practice are likely to be mandated for some businesses. Good Operating Practice requirements are likely to include both non-measurable elements (such as some aspects of pest control, food handling practices and personal hygiene) and measurable elements (such as holding certain chilled foods at less than 7°C).

Good Operating Practice contributes generally to the delivery of safe food, but usually its impact on hazards and risks is not known with precision. That is, its impact on public health and safety is unknown. Good Operating Practice is best seen as providing the minimum baseline standard for safe food; to the extent that aspects of Good Operating Practice are not met, the business may be heading in a direction that results in unsafe food and consumer sickness.

Hazard Analysis and Critical Control Point

Hazard Analysis and Critical Control Point (HACCP) “identifies, evaluates, and controls hazards which are significant for food safety”³.

³ Codex General Principles of Food Hygiene. Available from Codex Alimentarius Commission website: (www.codexalimentarius.net)

HACCP is a more advanced food control system than Good Operating Practice because it focuses on specific hazards that are significant for food safety. HACCP principles, as described below, should be applied after the Good Operating Practice components of the Food Control Plan are in place.

HACCP principles 1 and 2 (a hazard analysis and identifying critical control points) will always be applied. Where this results in one or more critical control points being identified, then HACCP principles 3 through 7 apply and must be included in the Food Control Plan.

A 'critical control point' is defined by Codex as 'a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level'. For example:

- pasteurisation
- cooking.

The standard steps in implementing HACCP, as developed by Codex⁴, are as follows:

1. Conduct a hazard analysis.
2. Determine the Critical Control Points (CCPs).
3. Establish critical limits.
4. Establish a system to monitor control of the CCPs.
5. Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control.
6. Establish procedures for verification to confirm that the HACCP system is working effectively.
7. Establish documentation concerning all procedures and records appropriate to these procedures and records appropriate to these principles and their application.

Good Operating Practice elements and HACCP principles may be applied by:

- NZFSA, for example by developing Codes of Practice or HACCP templates and models
- by an industry group developing a Code of Practice for a specific sector or process
- by a 'person' developing a unique Food Control Plan for their particular process.

The application of Good Operating Practice and HACCP is described graphically in Appendix D.

Food Control Plan Principle 3: Food Control Plans will be based on Good Operating Practice (GOP), covering both safety and suitability, and on HACCP principles for food safety related to the process and intended use of the product

Development of Food Control Plans

In the future, a variety of ways might be developed for 'persons' to have choices in arriving at a Food Control Plan appropriate to them. These include, but are not limited to, basing their Food Control Plan on:

- existing risk-based management plans (e.g. food safety programmes, product safety programmes and risk management programmes)
- tailor-made plans or plans developed individually, possibly using NZFSA or industry templates or models as a base
- a Code of Practice designed by, for example, an industry or an association for a specific situation and approved by NZFSA
- off-the-shelf products (particularly for small, low-risk operations) drawn from, for example, NZFSA-recognised Codes of Practice or templates or from international guidelines or Codes of Practice.

⁴ Codex Alimentarius Commission Alinorm 97/13A. Available from Codex Alimentarius Commission website: (www.codexalimentarius.net)

Good Operating Practice and HACCP should be reviewed on an ongoing basis and the Food Control Plan amended as necessary.

Flexibility in design of Food Control Plans

It is intended that businesses be allowed to innovate in designing Food Control Plans. 'Persons' may propose alternative methods to meet requirements set in law and/or in recognised Codes of Practice, templates or models. It will be necessary to demonstrate at least equivalent control of hazards, safety and suitability.

Food Control Plan Principle 4: Alternative methods to meet requirements set in law may be used where equivalent control of hazards, safety and suitability issues can be demonstrated to the regulator's satisfaction.

Content of Food Control Plans

Food Control Plans are intended to cover the following components to the level appropriate for the business:

- responsibilities and authorities – administrative details such as name and address
- scope – product and process description
- relevant regulatory requirements, including Food Standards Code requirements
- Good Operating Practice procedures, including any structural requirements, and control measures – e.g. identification of problems that need control, monitoring procedures, corrective procedures and internal verification processes and review processes
- documentation and record keeping
- application of HACCP principles, including hazard identification and analysis, critical control points and critical limit determination, critical control point monitoring and corrective actions when needed and internal verification
- training
- external verification, and verifier competencies and rights.

More detail on each of the above components, including justification for the inclusion of each, is available in Appendix E.

A Food Control Plan may, for the very simplest operation, be in the form of a checklist. It is expected that this will be supported by more detail in, for example, a Code of Practice.

Implementation and operation of Food Control Plans

Some issues on operating a Food Control Plan – registration, verification, evaluation and confirmation – are the subject of other Papers in this review.

Food Control Plans will be different for different businesses, and their complexity will vary. For example:

- For small-scale operations undertaken only periodically (e.g. organised food festivals), the Food Control Plan is likely to be a specific list of instructions or a check sheet developed by the regulator. The responsible individual will probably not be required to formally register the Food Control Plan, but will be 'deemed' to have agreed to the Food Control Plan by collecting the instructions. The value of education in these circumstances is significant.

- For large or on-going activities, even if they are non-commercial, the regulator will want to know what is occurring, where and when. An obligation may be placed on the organiser to inform the regulator, and to ensure that individual participants are provided with the relevant instructions or check sheet.

Any commercial food operators will need to have an appropriate approved and registered Food Control Plan.

Essential aspects of food-safety that will be the sole responsibility of the 'person' in charge include:

- training and capability
- monitoring of control measures to ensure they are effective
- corrective action taking when control measures go wrong
- internal verification such as review, audit, equipment calibration and product testing
- document control and record-keeping, including records of monitoring, corrective actions and internal verification.

More detail on these aspects is covered in Appendix E.

Appendix A

Problems identified in the current food system

The following problems were identified and described in Paper 1 of this Review:

- rising incidence of food-borne illness
- confusion about when government involvement is undertaken
- difficulty in applying current controls in terms of size of business, the risks involved, and the range of food and related products involved
- complexity of controls
- lack of practicality of some controls
- inconsistency in the impact on businesses
- lack of clarity (and consistency) about how much facilitation and guidance NZFSA as regulator will provide and how much 'persons' must do for themselves
- ill-defined roles of key players ('persons', auditors, verifiers and the regulator)
- lack of common understanding of good hygienic practice (GHP) and other key concepts
- duplication, overlaps and gaps in laws and consequential costs for 'persons'.
- absence of risk assessments in the food sector.

Appendix B

Proposed principles for Food Control Plans

- Food Control Plan Principle 1:** All 'persons' will have and implement a documented Food Control Plan unless agreed alternative mechanisms are in place.
- Food Control Plan Principle 2:** Food Control Plans will cover all relevant safety and suitability issues.
- Food Control Plan Principle 3:** Food Control Plans will be based on Good Operating Practice (GOP), covering both safety and suitability, and on HACCP principles for food safety related to the process and intended use of the product.
- Food Control Plan Principle 4:** Alternative methods to meet requirements set in law may be used where equivalent control of hazards, safety and suitability issues can be demonstrated to the regulator's satisfaction.

Appendix C

Principles set out in the Domestic Food Review

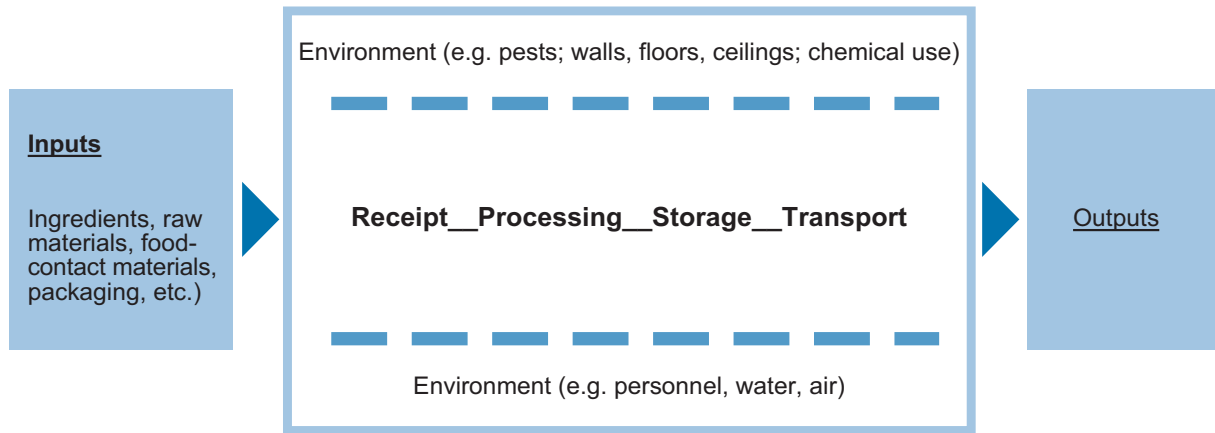
The first Paper in this Review of the food regulatory programme on context set out several underpinning policy principles for the domestic regulatory programme. The policy principles are intended to apply to all future government involvement in the New Zealand food sector. The principles are:

- Policy Principle 1:** Government involvement and imposed compliance costs to the food sector will be minimised, consistent with Government policies and the need for food to be safe and suitable.
- Policy Principle 2:** The New Zealand food regulatory programme will be based on application of the current “Regulatory Model”.
- Policy Principle 3:** Any government involvement and regulatory controls will be risk-based and science-based as far as possible.
- Policy Principle 4:** ‘Persons’ will take responsibility for producing safe and suitable food.
- Policy Principle 5:** Regulatory requirements will be applied consistently and equitably across sectors and groups.
- Policy Principle 6:** The food regulatory programme will be seamless and coherent.
- Policy Principle 7:** Trade and commerce in food and food-related products will be facilitated.

Appendix D

Application of Good Operating Practice and HACCP

STAGE 1: APPLYING GOOD OPERATING PRACTICE TO ALL OPERATIONS



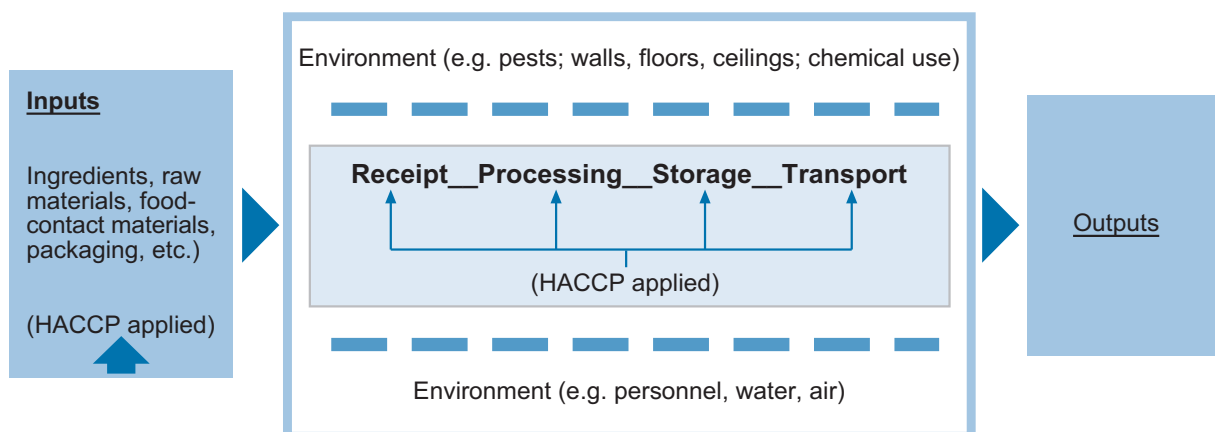
STAGE 1: BUSINESS OPERATING UNDER GOOD OPERATING PRACTICE

- Business is operating under Good Operating Practice (GOP). Includes environment and actual process flow.
- These could include Good Operating practices such as pest control, water, staff procedures, operational procedures for the actual process
- These Good Operating Practices may not have been documented previously. Documentation is completed at this stage.

At this stage, the business has not examined its processes to determine Critical Control Points.

Proceed to **Stage 2**.

STAGE 2: APPLYING RELEVANT HACCP PRINCIPLES TO FOOD PROCESSES

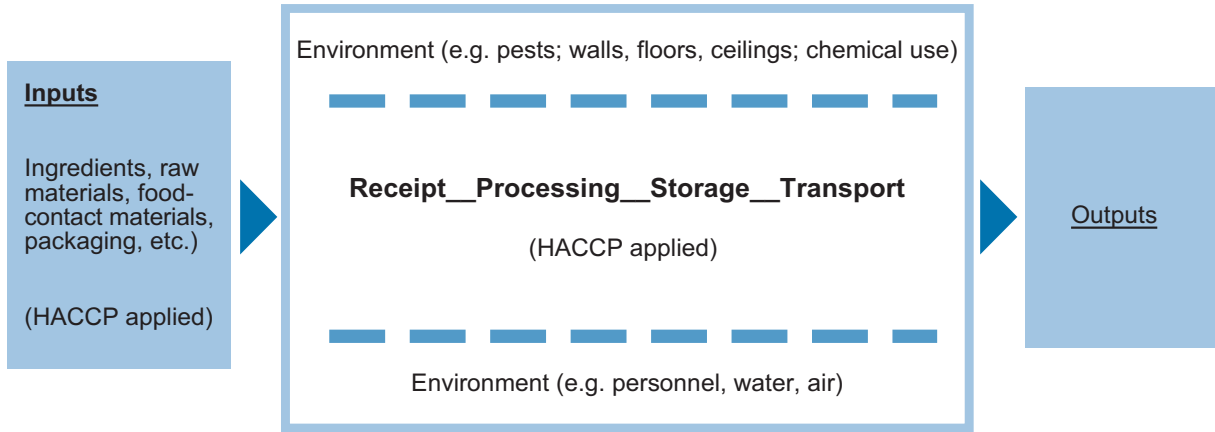


STAGE 2: APPLICATION OF HACCP PRINCIPLES

- Apply HACCP principles to all inputs, process flow, and each process step.
- Identify whether there are Critical Control Points (CCPs), and if so how many.

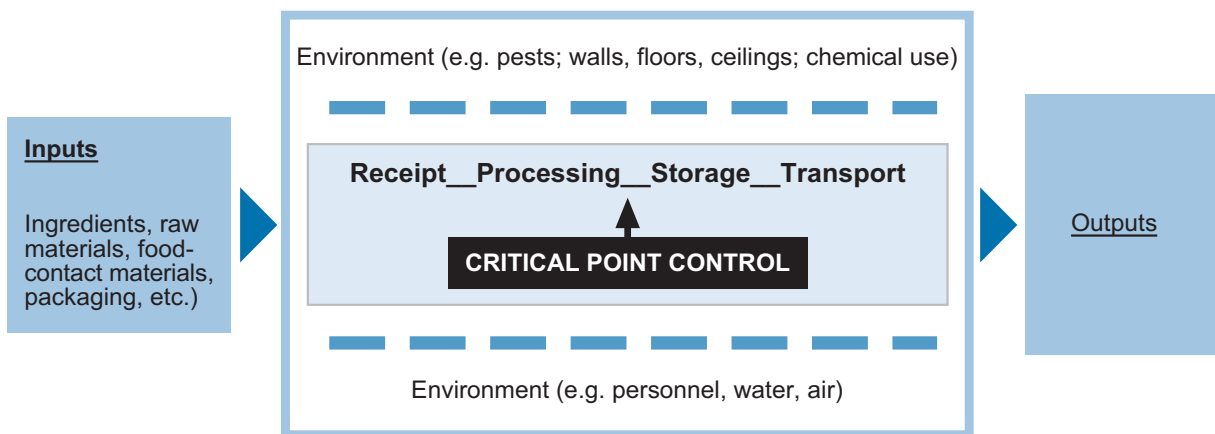
Proceed to either **Stage 3a** (no critical control points) or **Stage 3b** (critical control point(s) identified).

STAGE 3A: GOOD OPERATING PRACTICE PLUS HACCP APPLICATION (NO CCPS IDENTIFIED)



- Hazard identification and analysis including identification of control measures, and CCP determination will be documented for actual process flow (process steps and inputs).
- All controls for actual process flow (process steps and inputs) will be covered by Good Operating Practice (as in Stage 1) .
- Review Good Operating Practice to ensure that food safety integrity of process flow is included, assured and 'seamless'.
- Document Food Control Plan.
- Implement Food Control Plan.

STAGE 3B: GOOD OPERATING PRACTICE PLUS HACCP (WITH CCPS IDENTIFIED)



- As one or more CCPs has been identified, document application of all HACCP principles.
- Integrate Good Operating Practice and HACCP into a "seamless" Food Control Plan to maximise food safety control.
- Document Food Control Plan.
- Implement Food Control Plan.

Appendix E

Proposed Components of a Food Control Plan

1. RESPONSIBILITIES AND AUTHORITIES

The following responsibilities and authorities shall be documented:

- *who is responsible for management of the Food Control Plan*
- *who is responsible for monitoring, corrective action taking, and internal verification activities (including any reporting requirements).*

The persons responsible for the above tasks shall have knowledge and skills appropriate to the effective operation of the Food Control Plan.

2. SCOPE

The scope needs to include a description of the product(s) and process(es) covered by the Food Control Plan.

A Food Control Plan can incorporate material by reference.

Product description

Product should be described either singularly or in groups in such a way that it doesn't compromise hazard identification and analysis. The intended use of the product and intended consumer (e.g. for human and animal consumption) for that product should be stated.

Process description

The process shall be described in such a manner that hazard identification and analysis is not compromised. All steps in the process shall be documented, including the beginning and endpoint of the process.

A flow diagram is generally suggested as the most suitable means of illustrating the process, but other options are acceptable.

Whatever method is chosen, it should be clear that:

- all steps, including inputs (e.g. ingredients, processing aids and food-contact materials) and outputs, have been considered
- the information accurately reflects the scope of the Food Control Plan.

3. PROCEDURES FOR GOOD OPERATING PRACTICE

Written procedures will be needed under the Good Operating Practice system relevant to the 'persons' business and should cover:

- *purpose and scope (reason for procedure, what source(s) of hazards it covers and the range of application)*
- *authorities and responsibilities (who looks after the procedures, including responsibilities for monitoring, corrective action and internal verification)*
- *materials and equipment (any specific tools required to carry out a procedure)*
- *actual procedures (includes control measures, monitoring, corrective action taking, and internal verification), monitoring of control measures to ensure they are effective (what, how, when, where), corrective action taking when control measures go wrong (what, how, where), internal verification (what, how, when, where) covering review/audit, calibration, product testing if any, full Food Control Plan review. **See section 5 of this Appendix.***
- *documentation and record keeping (document control, records for monitoring, corrective actions and internal verification). **See section 6 of this Appendix.***

3.1 Elements for Good Operating Practice Systems

Select those headings⁵ appropriate to your business. Note that the some headings may be combined by a particular business.

Primary production

- environmental hygiene
- hygienic production of food sources
- handling, storage and transport
- cleaning, maintenance and personnel hygiene

Processing: design and facilities

- location
- premises and rooms
- equipment
- facilities

Control of operation

- control of food hazards
- key aspects of hygiene control systems
- incoming material requirements
- packaging
- water
- management and supervision
- documentation and records
- recall procedures

Processing: maintenance and sanitation

- maintenance and cleaning
- cleaning programmes
- pest control systems
- waste management
- monitoring effectiveness

Processing: personal hygiene

- health status
- illness and injuries
- personal cleanliness
- personal behaviour
- visitors

⁵ These headings have been sourced from *General requirements (food hygiene) (2001) Codex Alimentarius Commission. Vol1B. Second edition. Available from Codex Alimentarius Commission website: (www.codexalimentarius.net)*

Transportation

- general
- requirements
- use and maintenance

Product information and consumer choice

- lot identification
- product information
- labelling
- consumer education

Training

- awareness and responsibilities
- training programmes
- instruction and supervision
- refresher training

4. APPLICATION OF HACCP PRINCIPLES**4.1 Hazard identification and analysis**

List all potential hazards associated with each step, conduct a hazard analysis, and consider any measures to control identified hazards.

All hazards that may be reasonably expected to occur from: raw materials and other inputs into a process, as well as process steps themselves, shall be identified and documented.

The identified hazards should be reviewed to determine which are of a nature that their control is essential to the production of food fit for purpose.

Adequate control must then be applied to each of the hazards using one or more control measures. Where a hazard cannot be controlled, this should be noted.

The impact of an individual process step on identified hazards needs to be considered and documented where relevant. Hazards coming forward from previous steps need to be considered (not necessarily documented) until the point where they are controlled (at which point they need to be documented) or identified as uncontrolled hazards at the end of the process.

Biological, chemical and physical hazards need to be identified as appropriate.

Hazards may be identified individually or as a group. Grouping of hazards should not compromise the identification of a relevant control measure or combination of measures and the ability to identify any uncontrolled hazards. The cause or source of hazard also should be shown.

Hazard details may need to be provided or be available (in Codes of Practice on website, etc. from the NZFSA) rather than individual businesses having to carry out hazard identification by themselves.

Where a hazard occurs at many steps in a process, it may be sufficient for that hazard to be addressed once through a Good Operating Practice system.

Any hazard analysis should consider, where appropriate:

- established Good Operating Practice
- any risk assessments which look at the risk (severity and likelihood) of adverse health effects where known
- process and performance criteria.

Hazard analysis needs to consider those hazards where their elimination or reduction to acceptable levels is

essential for the production of food fit for intended purpose. Hazard analysis may highlight any unacceptable levels of hazards in relation to limits set in law. Such analysis links to the determination of critical control points (CCPs).

4.2 Critical control point (CCP) determination

Critical control points, if any, need to be determined and documented.

The intent of the HACCP system is to focus control at critical control points (if any). Critical control points should be used sparingly.

The basis for determining critical control points needs to be clear. A critical control point needs to have a control measure (or combination of measures) available to eliminate or reduce an unacceptable level of a hazard or group of hazards to a level fit for intended purpose.

A critical control point may be determined by use of a decision tree. More than one critical control point may be necessary to achieve an appropriate level of hazard control. Alternatively, more than one hazard may be controlled by a critical control point. In situations where no critical control point is identified, then application of the HACCP principles stops here.

4.3 Critical limits for critical control points

For each critical control point chosen, critical limits need to be established and be measurable, appropriate and achievable by the business.

Critical limits are most likely to be regulated limits.

4.4 Monitoring of critical control points

The monitoring process for each of the critical control points needs to be documented.

The documentation needs to include the following:

- who is responsible for monitoring⁶
- what has to be done
- how it is to be carried out
- when it is to be done
- what records are to be kept.

4.5 Corrective actions for critical control points

The proposed corrective action needs to be documented for any critical control point

The documentation shall include the following:

- who is responsible for corrective action taking⁷
- how control is to be restored
- how control and disposition of product is to be managed (includes non-conforming product)

⁶ This would not be necessary in the case of a sole "person"

⁷ This would not be necessary in the case of a sole "person"

- what preventative actions are to be taken including escalating response if not resolved;
- what records are to be kept.

5. INTERNAL VERIFICATION PROCEDURES

A process for internal verification for the food control plan needs to be documented and performed by or on behalf of the food business

Personnel carrying out internal verification activities should, if at all possible, be independent of the food control plan component being verified. Internal verification consists of activities such as confirmation that:

- the documentation is complete and complies with all legislative requirements
- the plan is appropriate to the operation
- if a new operation, the premises and equipment are ready to operate in accordance with the plan
- the plan is capable of consistently delivering product fit for intended purpose.

Internal verification includes review/audit activities, and if appropriate, product testing, calibration and review of the Food Control Plan. The procedures need to be documented in the Food Control Plan, including:

- who is responsible for it (see previous footnote)
- how it is done
- when it is to be done
- the follow-up action to be taken when non-compliance occurs
- what is to be recorded.

6. DOCUMENTATION AND RECORD KEEPING PROCEDURES

Documentation shall include all components of the Food Control Plan either within the Food Control Plan or by reference (see 'Introduction' to this Paper).

Records shall be kept for:

- *monitoring and corrective action for Good Operating Practice activities; (section 3)*
- *monitoring and corrective action taken at any CCPs(sections 4.4 & 4.5)*
- *internal verification (section 5)*

The level of documentation should be appropriate to the nature and size of the business.

Records should be secure and retrievable. Records shall be retained as per legislative requirements and as relevant to the business.

Specific record keeping requirements may be stated in industry sector Codes of Practice.

