Ministry for Primary Industries
Manatū Ahu Matua

Operational Code

Cold and Dry Stores

Draft for Consultation

[Document Date]

Issued by the Ministry for Primary Industries

New Zealand Government

TITLE

Operational Code: Cold and Dry Stores

COMMENCEMENT

This Operational Code is effective from [Effective Date]

ISSUING BODY

This Operational Code is issued by the Ministry for Primary Industries.

Dated at Wellington [Document Date]

Aaron Tangaroa
Acting Manager Animal Products
Ministry for Primary Industries
(acting under delegated authority of the Director General)

Draft for Consultation

Contact for further information
Ministry for Primary Industries (MPI)
New Zealand Food Safety
PO Box 2526
Wellington 6140

Email: animal.products@mpi.govt.nz

Contents

Page

Introduction **4**

Part 1: Structure of this code **8**
1.1 General 8
1.2 Layout of Parts 8
1.3 Documentation of GOP 9
1.4 Definitions 10
1.5 Resources for developing an RMP 14

Part 2: General requirements **15**
2.1 Document control and record keeping 15
2.2 Personnel health and hygiene 18
2.3 Personnel competencies and training 23
2.4 Operator verification and notifications 26
2.5 Corrective action 31

Part 3: Design, construction and maintenance of buildings, facilities and equipment **33**
3.1 Overview 33
3.2 Building design and construction 34
3.3 Essential services 41
3.4 Suitable water 44
3.5 Equipment 49
3.6 Amenities 52

Part 4: Repairs and maintenance **54**
4.1 Overview 54
4.2 General requirements and procedures 54
4.3 Programmed and non-programmed maintenance 55
4.4 Building maintenance 57
4.5 Equipment maintenance 58

Part 5: Cleaning and sanitation **62**
5.1 Purpose and scope 62
5.2 General requirements and procedures 62
5.3 Monitoring 65
5.4 Records 65

Part 6: Supporting systems **66**
6.1 Receipt of incoming materials 66
6.2 Storage 67
6.3 Traceability, inventory and labelling 80
6.4 Calibration 83
6.5 Chemical control 86
6.6 Pest control 89
6.7 Non-complying product and recall 92
6.8 Waste management 95
6.9 Transport 97
6.10 Other requirements specific to dairy 100

Draft for Consultation

Part 7: HACCP application **102**
7.1 Introduction 102
7.2 HACCP application 104

Part 8: Identification and control of risk factors related to wholesomeness **113**
8.1 Introduction 113
8.2 Identification and control of risks to wholesomeness 113

Schedule 1: Specification for suitable water supplied by the operator **114**

Draft for Consultation

Introduction

(1) This introduction is not part of the Operational Code, but is intended to indicate its general effect.

(2) This Operational Code (Code) assists store operators to:

a) comply with the requirements of the Animal Products Act 1999 (APA) and relevant subordinate legislation; and
b) to ensure that products processed and/or stored in their premises are safe and suitable for their intended purpose.

(3) This Code has been developed by the Ministry for Primary Industries (MPI), in consultation with industry.

Purpose

(1) This Code has been developed to provide guidance for meeting the requirements for the development, registration and implementation of a risk management programme (RMP).

Background

(1) This Code applies to stand-alone cold and dry stores whose primary operation involves the refrigerated or ambient storage of products, including:

a) packaged animal materials and animal products (including dairy) for human and/or animal consumption;
b) non-animal product foods for human and/or animal consumption (e.g. horticultural produce, etc.); and
c) industrial use.

(2) Whenever possible, the requirements and procedures for storage have been harmonised to cover all types of products (i.e. dairy, non-dairy, and non-animal product foods). Requirements that are specific to dairy (e.g. transport of dairy products, reporting requirements for non-conforming products, etc.) are also included in this Code. This will assist those store operators who wish to develop a single RMP document that covers dairy and non-dairy animal products, and non-animal product foods.

(3) This Code does cover the cooling or chilling of products to their required preservation temperature whilst in storage where appropriate (e.g. blast freezing, etc.).

(4) The re-development of the Code has been undertaken to:

a) update it in line with current legislation;
b) use a plain English approach to its style;
c) combine the existing 3 Parts of the Code of Practice into one document;
d) include relevant information from the Red Meat Industry Standard 9 Storage and Transport (IS9);
e) align its format with MPI's new standardised templates for documents as an Operational Code; and
f) re-issue the RMP Template for Cold and Dry Stores as a separate document.

(5) The RMP Template for Cold and Dry Stores has been revised to complement this Code and is published in a new MPI standardised format. Using the template is one way of meeting the RMP requirements.

Who should read this Operational Code?

(1) This Code applies to stand-alone cold and dry stores whose primary operation involves the refrigerated or ambient storage of products, including dairy and non-dairy animal products, and non-animal product foods, for human and/or animal consumption, and should be read by:

a) RMP operators;

Draft for Consultation

b) transport operators;
c) recognised RMP evaluators;
d) recognised RMP verifiers; and
e) regulators.

Exclusions

(1) This Code does not apply to:

a) freezers or chillers, and other storage facilities covered by an RMP where freezing or chilling is just one of a series of processing steps for the production or manufacturing of a product;
b) facilities for the storage of raw milk (e.g. milk storage stations, bulk silos at rail heads, collection points, on-farm silos, etc.); or
c) transport operators who are not store operators and do not transport dairy.

(2) This Code has been developed based on New Zealand requirements only and does not cover export requirements such as the:

a) Animal Products Notice: Official Assurances Specifications for Animal Material and Animal Products 2017; and
b) Animal Products Notice: Official Assurances Specifications for Dairy Material and Dairy Products 2017.
Note: Exporters must ensure that they meet all export requirements (e.g. overseas market access requirements (OMARs) relevant to their product and intended market, official devices such as container seals, etc.). This Code forms the basis of the minimum standard for those who wish to export.

Draft for Consultation

Why is this important?

(1) An operator can develop and implement their RMP in accordance with this Code. This will:

a) ensure that the operator complies with acceptable industry practices and procedures;
b) ensure that the operator meets relevant regulatory requirements; and
c) simplify and reduce the cost of developing and evaluating the RMP.

(2) This Code clarifies MPI's expectations on how regulatory requirements may be met. This will assist RMP operators, RMP verifiers and RMP evaluators to have a consistent understanding of the requirements and their applications.

(3) A Code is intended to be a guide on how to meet legislative requirements. If an RMP operator incorporates the whole or part(s) of the Code into their RMP, then the incorporated part(s) of the Code becomes mandatory (i.e. it is no longer a guide) and legally enforceable. This means a 'should' becomes a 'must' except in guidance boxes or guidance tables, or if an operator excludes that clause from their RMP when incorporating the Code.

(4) An RMP Operators Resource Toolkit has been developed with example forms and procedures to assist operators in developing or improving their RMP. The Toolkit is referenced throughout this Code.

(5) The store operator may use alternative approaches, provided all the relevant regulatory requirements are met. Those who wish to use an alternative approach should refer to the RMP Manual for guidance.

(6) Relevant requirements that were previously published in the Red Meat Industry Standard 9 Storage and Transport (IS9) have been incorporated in this Code, as IS9 will be phased out.

Document History

(1) This document replaces the MPI Codes of Practices for Cold and Dry Stores:

a) Part 1: Overview 2006;
b) Part 2: Good Operating Practice 2006; and
c) Part 3: HACCP Application, and the Identification and Control of Other Risk Factors 2006.

(2) It coincides with the revision of the RMP Template for Cold and Dry Stores.

(3) The Code reflects the changes made to the Animal Products Notice: Specifications for Products Intended for Human Consumption 2020, and the Animal Products Notice: Specifications for Products Intended for Animal Consumption 2020.

(4) Other general updates have also been made.

Version Date	Section Changed	Change(s) Description
October 2020	All	General update

Main legislation

(1) The main legislation (Figure 1: Diagram of Main Legislation and Associated Documents) applicable to store operators includes, as appropriate:

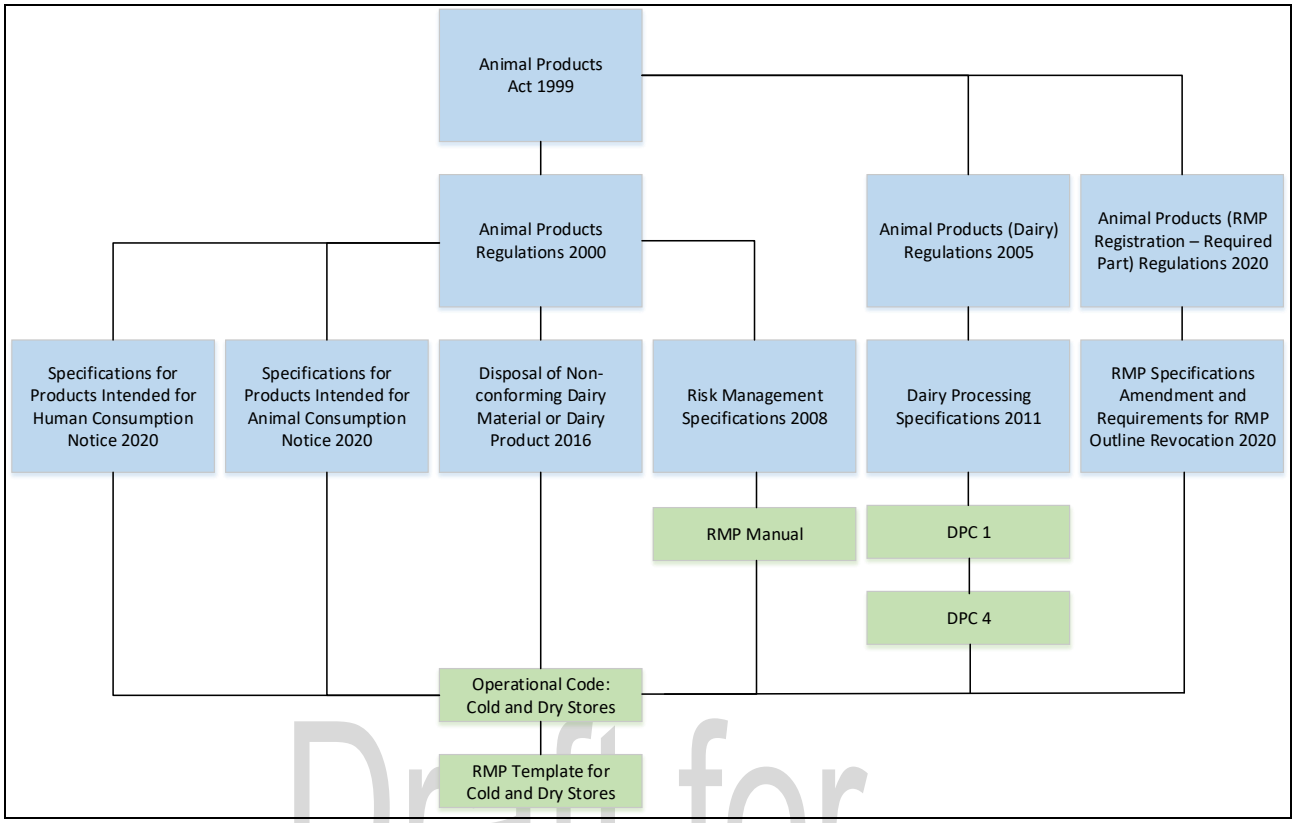
a) Animal Products Act 1999;
b) Animal Products Regulation 2000;
c) Animal Products (Dairy) Regulations 2005;
d) Animal Products (Risk Management Programme Registration – Required Part) Regulations 2020;
e) Animal Products (Risk Management Programme Specifications) Notice 2008;
f) Animal Products Notice: Risk Management Programme Specifications Amendment and Requirements for Risk Management Programme Outline Revocation 2020;
g) Animal Products Notice: Dairy Processing Specifications 2011;
h) Animal Products Notice: Specifications for Products Intended for Human Consumption 2020;
i) Animal Products Notice: Specifications for Products Intended for Animal Consumption 2020;
j) Animal Products Notice: Disposal of Non-conforming Dairy Material or Dairy Product 2016;
k) DPC 1: Animal Products (Dairy): Approved Criteria for General Dairy Processing; and
l) DPC 4: Animal Products (Dairy): Approved Criteria for Storage and Transportation of Dairy Material and Products.

(2) A complete list of legal requirements, guidance documents and forms that are relevant to store operators are listed in the Transport, Stores and Wharves Roadmap.

(3) Information specific to stores is available on the MPI website for Storage.

Consultation

Figure 1: Diagram of main legislation (blue) and associated documents (green)



Draft for Consultation

RMP template for stores

(1) The RMP Template for Cold and Dry Stores has been reviewed and has now been produced in a new format and covers more processes and activities. RMP templates are an alternative to developing a custom RMP and do not require an evaluation step. Refer to the RMP Manual for further guidance.

Part 1: Structure of this code

1.1 General

(1) This Code is separated into Parts. Each Part specifies requirements and procedures relating to different aspects of stores.

(2) This Code sets out the following:

a) Part 1: Structure of this Code;
b) Part 2: General Requirements;
c) Part 3: Design, Construction and Maintenance of Buildings, Facilities and Equipment;
d) Part 4: Repairs and Maintenance;
e) Part 5: Cleaning and Sanitation;
f) Part 6: Supporting Systems;
g) Part 7: HACCP Application; and
h) Part 8: Identification and Control of Risk Factors Related to Wholesomeness.

(3) Good operating practice (GOP) is essential for the constant production of products that are fit for their intended purpose and that meet the relevant regulatory requirements. This Code provides guidance on hygienic practices and process controls that directly or indirectly impact on the safety and suitability of products. Compliance with these measures will assist the operator meet the requirements of the APA.

(4) GOP is the foundation of Hazard Analysis and Critical Control Point (HACCP) and of risk management programmes (RMPs). The HACCP approach explained in Part 7 of this Code is based on the expectation that GOP is effectively implemented prior to the application of HACCP principles.

(5) GOP can also be described as Supporting Systems.

Draft for Consultation

1.2 Layout of Parts

Parts 2 to 6 are generally laid out with the following subheadings.

1.2.1 Purpose and scope

(1) This describes the purpose and scope of application.

1.2.2 General requirements and procedures

(1) General requirements, recommended procedures and guidance information are distinctly differentiated in this document.

(2) A regulatory requirement is identified by having a citation to the specific legislation from which the requirement is derived from, at the end of the relevant sentence or clause. The word "**must**" is often used to indicate its mandatory status. For example:

"All inputs, including products and packaging must be handled, processed, and stored in a manner that minimises any potential contamination or deterioration [AP Reg 9]".

(3) In many cases, the mandatory requirements have been paraphrased for context. The operator should refer to the cited legislation for the actual wording or the legal requirement.

(4) The abbreviations used for legislation cited in this Code are:

a) **APA** – the Animal Products Act 1999;
b) **AP Reg** – the Animal Products Regulation 2000;
c) **HC Spec** – the Animal Products Notice: Specifications for Products Intended for Human Consumption 2020;

d) **AC Spec** – the Animal Products Notice: Specifications for Products Intended for Animal Consumption 2020;
e) **Dairy Processing Spec** – the Animal Products Notice: Dairy Processing Specifications 2011;
f) **RMP Spec** – the Animal Products (Risk Management Programme Specifications) Notice 2008;
g) **DPC 1** – the DPC 1: Animal Products (Dairy): Approved Criteria for General Dairy Processing;
h) **DPC 4** – the DPC 4: Animal Products (Dairy): Approved Criteria for Storage and Transportation of Dairy Material and Products; and
i) **Disposal of Non-conforming Dairy Material or Dairy Product** – the Animal Products Notice: Disposal of Non-conforming Dairy Material or Dairy Product 2016.

(5) Industry agreed requirements or recommended procedures are accepted or industry agreed means of achieving or complying with regulatory requirements. To differentiate them from regulatory requirements, the word "**should**" is used rather than "**must**".

(6) There may be cases when the operator may decide to use an alternative process, procedure or parameter that is not provided for in this Code (e.g. when new technology becomes available). The operator must be able to demonstrate the effectiveness of any alternative to consistently meet all relevant regulatory requirements and produce products that are fit for their intended purpose (validation).

(7) Confirmation of the effectiveness of any alternative process, procedure or parameter may involve the collection and analysis of evidence by the operator (e.g. data from testing or trials, published scientific information, report from an expert, etc.). A protocol for the collection of data should be prepared by the operator as discussed in the RMP Manual.

1.2.2.1 Guidance

Guidance

Guidance material is presented in a 'guidance box'. It provides explanatory information, examples or options for achieving a particular outcome or requirement. The operator may use alternative methods or measures to those set out in the guidance material provided they do not in any way compromise GOP and the achievement of regulatory requirements. Justification is not needed when deviating from guidance.

1.2.3 Monitoring

(1) This identifies how the process will be monitored and corrective actions taken.

1.2.4 Records

(1) This section gives the list of records that should be kept by the operator.

1.3 Documentation of GOP

1.3.1 Procedures

(1) The RMP Spec requires the operator to document sufficient procedures to ensure that GOP is applied. These procedures must cover:

a) the control of hazards and other risk factors;
b) any parameters to be met;
c) any monitoring procedures that are to be carried out; and
d) any corrective action procedures that are to be applied in the event of loss of control, including restoration of control, identification and disposition of affected product, and any measures to be taken to prevent reoccurrence of loss of control [RMP Spec 11].

(2) When the Code does not cover a particular procedure required for the operator's RMP, the operator will need to write their own procedures. Sufficient detail should be given to:

Draft for Consultation

a) ensure that managers and staff know what to do;
b) assist in staff training;
c) show how legal requirements are met; and
d) ensure clear understanding by RMP verifiers and RMP evaluators.

(3) Refer to 2.1: Document Control and Record Keeping for the contents of procedures.

1.3.2 Procedures to be written

(1) Additional written procedures that should be documented by the operator include, as appropriate:

a) storage;
b) document control (e.g. amendments);
c) personal health, hygiene and training (e.g. induction);
d) operator verification;
e) corrective action (e.g. corrective action register);
f) suitable water monitoring;
g) repairs and maintenance;
h) cleaning, sanitation and chemicals (e.g. chemical register);
i) incoming materials and inventory control;
j) pest control (e.g. bait station monitoring); and
k) load-out and dispatch.

1.4 Definitions

(1) In this Code, unless the context otherwise requires:

Act or **APA** means the Animal Products Act 1999

agricultural chemical means an agricultural compound used or intended for use on plants, and includes agricultural compounds that are applied to land, places or water in which plants or animals are managed

amenities include toilets, wash rooms, locker rooms, change rooms, lunch rooms and cafeterias

animal material means any live or dead animal, or any tissue or other material taken or derived from an animal

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

approved maintenance compound means any maintenance compound that is approved by the Director-General or listed in specifications made under the Act

bait station means a rigid device or container designed or adapted to physically contain bait in such a way as to:

a) allow unrestricted access by target pests while preventing or minimising the spillage of bait and access for off-target species; and
b) protect baits from the elements and extend its usable life

calibration means the procedure used for the comparison of a measuring instrument with a standard, under specific conditions, and adjustment of the instrument, if necessary

clean, when used as a verb, means to remove visible contaminants from any surface

control measure means any action and activity that can be used to prevent or eliminate a product safety hazard or reduce it to an acceptable level

corrective action means any action to be taken when the results of monitoring a process step or control measure indicate a loss of control

Draft for Consultation

Critical Control Point (CCP) means a step at which control can be applied and is essential to prevent or eliminate a product safety hazard or reduce it to an acceptable level

critical limit means a criterion which separates acceptability from unacceptability at a CCP

critical measurement means a measurement of a parameter that is identified in an RMP as critical for the suitability for processing or fitness for intended purpose of product or associated things

dairy material

a) means animal material that is:
    i) milk extracted from a milking animal; and
    ii) any material derived or processed from milk extracted from a milking animal, up until delivery of the material at the place of sale for consumption or for end use for purposes other than consumption, or its export; and
b) includes dairy product that, having been purchased or imported, is further processed

dairy product

a) means animal product that, having originally been dairy material–
    i) has been delivered to the place of sale for consumption, or for end use for purposes other than consumption; or
    ii) has left New Zealand's territorial waters in the course of its export; and
b) includes dairy produce within the meaning of the Dairy Industry Act 1952 (as in force before its repeal by section 75 of the Animal Products (Ancillary and Transitional Provisions) Act 1999)

documented procedure means a written, printed or electronic description of a process or system that is followed by the operator

equipment includes:

a) the whole or any part of any utensil, machine, fitting, device, instrument, stamp, apparatus, table or article that is used in or is available for use for preparing, marking, processing, packing, storing, carrying, or handling any product; and
b) any utensil or machine used or capable of being used in the cleaning of any equipment or facilities

facilities include amenities, storage areas and work areas

finished product means product which has been packaged, in the manner intended for sale, and includes product awaiting the decision concerning compliance with regulatory requirements

good operating practice (GOP) means the documented procedures relating to practices that are required to ensure products are fit for their intended purpose (may also be referred to as Good Manufacturing Practice, GMP)

HACCP means the Hazard Analysis and Critical Control Point system adopted by the Codex Alimentarius Commission

hazard means a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect

industrial use means non-food animal products not for human and/or animal consumption (e.g. pharmaceuticals (i.e. blood), hides and skins, bee wax, wool or fibre, trophies, tallows, etc.)

label includes any wording, tag, brand, symbol, picture, or other descriptive matter written, printed, stencilled, marked, embossed, impressed on, appearing on, attached to, or enclosed within any product

lot means a homogenous quantity of relevant product manufactured during a discrete period of time, typically not exceeding 24 hours, as part of one continuous process

lot identification means an identifier that is sufficient to enable the source of a lot to be traced

Draft for Consultation

maintenance compound means any substance:

a) used for maintaining, repairing, servicing, cleaning, or sanitising equipment or surfaces that may be the source of, or result in, contamination of product or associated things;
b) used for treating water; or
c) used for pest control

minimise means to have taken all practical steps to substantially reduce the potential hazard of concern, consistent with what is technologically feasible

monitoring means the act of conducting a planned sequence of observations or measurements of control parameters to assess whether an operation or activity is carried out effectively and/or assesses whether a CCP is under control

MPI means the Ministry for Primary Industries

non-conforming dairy material or dairy product means any dairy material or dairy product that is suspected or known not to meet regulatory requirements or not to have been processed in accordance with regulatory requirements

non-complying product means any product that:

a) does not meet regulatory requirements (e.g. product eligibility, process or product criteria);
b) does not meet a limit or criteria defined by the operator in the RMP; or
c) has been processed in accordance with procedures written in the RMP

operator, or **RMP operator,** means a person who operates an animal product business that is subject to a registered risk management programme

packaging:

a) means any material that is intended to protect and that comes into immediate contact with a product;
b) includes rigid materials such as cartons and containers where product is filled directly into the carton or container; and
c) includes any other material contained with, in, or attached to, the product (such as labels, satay sticks and heat sensors, etc.)

pathogen means an organism such as bacteria (e.g. *Salmonella* spp., etc.), viruses (e.g. Norovirus, *Hepatitis* A virus, etc.), or parasites (e.g. *Giardia*, *Cryptosporidium*, etc.) that may cause illness

personnel includes owners, directors, staff, visitors and contractors providing services

pest means any unwanted animal that:

a) may affect plants, animal or primary produce;
b) is an entity declared to be a pest by Order in Council; and
c) does not include any human being or living organism affecting only human beings or any living organism declared not to be a pest by Order of Council

place or **premises** includes any building, conveyance, craft, fishing vessel, or structure; and includes any land, water, or other area where material or products are produced or may be present

preservation temperature in relation to particular refrigerated animal material or animal product, means the range of temperatures specified in Regulations or Notices made under the Act or otherwise as specified by the operator, at which the animal material or animal product's fitness for purpose is preserved [HC Spec Definitions]

process includes storage [APA 4 Interpretation]

process control means all conditions and measures applied during storage that are necessary to ensure safe and suitable product

product means animal material and/or animal products (including dairy material and products) and non-animal product foods, and **products** has a corresponding meaning

Draft for Consultation

protected means sufficiently wrapped, packaged or enclosed to prevent the introduction of contaminants

protective clothing means special garments intended to preclude the contamination of product that are used as outer wear by persons; and includes coverings and footwear

recognised laboratory means a laboratory recognised under the Animal Product Notice: Specifications for Laboratories Notice 2020

refrigeration means the cooling (approximately 4°C) of a closed space by removing heat from it

re-packing:

a) when used as a noun, means a product which has been partially or fully processed and is incorporated and re-packaged into another lot or product; and
b) when used as a verb, means to incorporate re-packing into another lot of product

reticulation management plan means a document programme that contains procedures for the management of the water reticulation system, (including pipe work and fittings, e.g. backflow prevention devices, etc.), within the premises or place to ensure that the water quality is not adversely affected prior to the point of use

risk management programme (RMP) means a programme designated to identify, control, manage and eliminate or minimise hazards and other risk factors in relation to the production and processing of animal material and animal products in order that the resulting animal product is fit for intended purpose [APA 4 Interpretation]

sanitary design:

a) in relation to any premises or place, facility, internal structure, equipment, or conveyance, means designed, constructed, and located so that it:
    i) meets the requirements appropriate to the type of product and process, which includes a consideration of the movement of people, access and process flow; and
    ii) can be readily maintained, cleaned, sanitised and sterilised where required, to ensure that risk factors from contaminants and pests are minimised; and
b) in relation to any equipment or access way in any work area, means that the equipment or accessway is designed, constructed and located so that it:
    i) is easily accessible for maintenance, cleaning, operation, checking and inspection;
    ii) minimises the contact of contaminants with any animal material (other than live mammals or live birds), or product or other equipment; and
    iii) precludes the harbouring or accumulation of any contaminants or pests

Draft for Consultation

sanitise means the application of an approved maintenance compound or physical agent (e.g. steam or compressed air or water blasting or a combination of these), with the intention of reducing microbial contamination to a level that will avoid the creation of a hazard

stand-alone means a cold and dry store under its own single site and single business RMP

suitably skilled person means a person who in the opinion of the operator is skilled in a particular activity or task through training, experience or qualifications

suitable water means water that:

a) in relation to water supplied by an independent supplier (including a public or private supplier), is of a standard administered by the independent supplier under the Health Act 1956 and any Regulations made under that Act;
b) in relation to water supplied by the operator solely for the use of the operator (such as bore water, rainwater, surface water, or ground water):
    i) is of a standard equivalent to that referred to in paragraph (a), as determined by the operator based on an analysis of hazards and other risk factors; or

ii) complies with the requirements in Schedule 1 (of the Animal Products Notice: Specifications for Products Intended for Human Consumption).

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

tempering or thawing means the process of bringing a frozen product up to ambient room temperature

transport includes transport by road, rail, sea or air, and **transportation** has a corresponding meaning

transport operator means any person or business that engages in the transport of product between places or premises within New Zealand and includes courier operations and subcontractors who are used intermittently

transportation outer means a package, other than a transportation unit, that:

a) encases any packaged product for the purpose of transportation and distribution; and
b) is either removed before the product is used or offered for retail sale, or is not taken away by the consumer of the product

transportation unit means a container, a compartment, part of a vehicle, or vessel (includes a road vehicle, aircraft, railway wagon, ship, shipping container, bulk tank or trailer, etc.) used in the transport of product

vehicle means any motorised conveyance that holds or carries, or that includes, 1 or more transportation units on or in it and is designed to travel by road or rail

verification means the application of methods, procedures, tests and other checks to confirm compliance to the documented RMP and relevant regulatory requirements

waste includes, without limitation, all solids, liquids, and gases that the operator intends to dispose of as being unwanted and that may become a source of contamination or attract pests

water management plan means a documented programme that specifies the water quality standard and criteria, and procedures for the management of the water quality with a premises or place to ensure that the appropriate quality of water is delivered at the point of use

work area is an area where unprotected (exposed) product is stored, re-packed or temporarily held (e.g. in a chiller, under a canopy, etc.)

(2) References in this Code to clauses, appendices and parts are references to clauses, appendices and parts of this Code unless otherwise stated.

(3) Any term or expression used in this Code that is defined in the Act or Regulations made under the Act and used, but not defined, in this Code has the same meaning as in the Act or Regulations.

1.5 Resources for developing an RMP

(1) MPI has developed various resources to assist you when developing your RMP:

a) Risk Management Programme Manual;
b) What is Validation? provides information on validation concepts;
c) other Operational Codes or Codes of Practice;
d) Standardisation of Hazard Analysis and Critical Control Point (HACCP); and
e) MPI Hazard database has searchable information on food safety hazards that are reasonably likely to occur in New Zealand, including applicable regulatory limits and actions the operator can take to control the hazards.

Draft for Consultation

Part 2: General requirements

2.1 Document control and record keeping

2.1.1 Purpose and scope

(1) To ensure that:

a) all RMP documents are managed under a document control system so they are current and authorised;
b) obsolete documents are removed from use; and
c) records are managed.

2.1.2 General requirements and procedures

(1) The operator should include the following in each of the documented GOP programmes:

a) purpose and scope;
b) authorities and responsibilities;
c) materials and equipment, as applicable;
d) procedures (including monitoring, corrective action and operator verification);
e) records (including forms or check sheets); and
f) references to other relevant documents as applicable.

(2) Every document or part of a document that forms part of an RMP must be:

a) legible;
b) dated or marked to identify its version;
c) authorised (signed) prior to use, either directly or within the document control system, by:

i) the operator,
ii) the Day-to-day Manager of the programme, or
iii) a person nominated to do so in the programme's document control system [RMP Spec 19 (1)].

Draft for Consultation

Guidance

Documents should have a header or footer which identifies:

- the version or issue number;
- the issue date;
- the name of the document or identification reference number; and
- the page number, in the format of 'page ? of ?' (e.g. page 1 of 32).

(3) The operator must ensure every document is available when required to any person with responsibilities under the programme [RMP Spec 19 (1)].

(4) The operator must list all current RMP documents showing the document titles and their current versions and/or dates of issue [RMP Spec 12 (1)].

2.1.2.1 Document control

(1) The operator must implement procedures to:

a) control documents and records; and
b) ensure that the RMP is up-to-date and reflects actual operations [RMP Spec 19 (2) and HC Spec 9.2 (1)].

(2) The operator must document procedures for effective document control including how:

a) significant and minor amendments are made to the RMP so that the programme is current and reflects the actual operation;
b) the amendments, or the nature of the amendments to the programme are identified or described;
c) documents are authorised prior to issue and use; and
d) all amended parts of the RMP are replaced with the current versions at all distribution points without unnecessary delay after authorisation [RMP Spec 19 (2)].

Guidance

The operator should use an amendment register. Refer to the RMP Operators Resource Toolkit for examples. This can be useful when applying for a significant amendment to identify the pages affected by the amendment. Refer to RMP Spec clause 21.

2.1.2.2 Record keeping

(1) The operator must produce records demonstrating that the requirements of relevant animal product regulations, notices and the registered RMP are being met [HC Spec 9.2 (1)].

(2) Ensure records accurately reflect any observations taken and remain readable throughout their entire storage period.

(3) The operator must ensure records relating to the RMP's monitoring, corrective action and operator verification activities (including electronic) include:

a) the date and, where appropriate, the time of the activity or observation;
b) a description of the results of the activity or observation; and
c) the identity of the person(s) who performed the activity [RMP Spec 20 (2)].

(4) Electronic copies of RMP documents and records must be backed up and protected from corruption, damage or loss [RMP Spec 20 (1)].

(5) The operator must ensure all records are:

a) legible;
b) stored for 4 years, or for the shelf-life of the product to which the records related (whichever is longer); and
c) stored in a manner which protects the records from damage, deterioration or loss [RMP Spec 20 (1)(a) and (b)].

Draft for Consultation

Guidance

The requirements given in 2.1.2.2: Record Keeping apply to both paper and electronic records.

Record dates and times appropriate to the activity being monitored. For example, the monitoring of certain critical preservation times and/or temperatures may require the recording of the exact date and time when the observation is made. Monitoring a more general time period may be acceptable (e.g. shift) for the observation of certain GOP programmes (e.g. checking for compliance with personal protective equipment (PPE) requirements).

Consider for paper records:
- the durability of paper on which records are kept (e.g. pen does not write well on wet paper);
- its suitability for storage (e.g. thermal papers can fade over time); and
- the writing tool used (e.g. pencil is not suitable because it is easy to erase or alter).

Altering records should be noted alongside the original entry and initialled by the person amending the record. Single pen strokes should be used to delete errors. White out (e.g. Twink™) is not acceptable to auditors and RMP verifiers as it is not possible to see the original entry.

Consider for electronic records:
- systems for backing up the documents and files;
- security of documents and files; and
- version control of documents when amending the record.

Recording information on a whiteboard is not considered a record.

2.1.2.3 Accessibility of RMP documents and records

(1) The operator must ensure that RMP documents, monitoring and verification records and any archived documents are accessible or can be retrieved and made available, within 2 working days of any request, to:

a) recognised persons;
b) Animal Product Officers;
c) the Director-General; and
d) persons authorised by the Director-General [RMP Spec 19 (4), 20 (1)(c), 20 (3), HC Spec 9.3 (2)(a) and (c), AC Spec 5.2 (3)(a) and (c)].

(2) The operator must keep a register of all RMP documents showing the current version and/or date of issue [RMP Spec 20 (2)].

(3) The operator must maintain an amendment record with the following information:

a) document and specific part being amended;
b) details of the amendment;
c) reason for the amendment;
d) date of change; and
e) person approving the amendment [RMP Spec 20 (2)].

2.1.2.4 Documentation for receipt of incoming materials

(1) All documentation accompanying incoming products, including information necessary for the effective identification, traceability and inventory control of products, should be checked for completeness and accuracy.

(2) All consignments must have a unique identification and/or label to enable traceability to be maintained [HC Spec 28.2 (1)].

(3) All consignments must be entered in the inventory control system [HC Spec 28.2 (1)].

Draft for Consultation

2.1.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate. Refer to 2.4: Operator Verification and Notifications.

2.1.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for document control:

a) up-to-date list of documents;
b) all RMP records (including verification records);
c) important correspondence with their RMP verifier and with MPI; and
d) amendments and obsolete documents.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

2.2 Personnel health and hygiene

2.2.1 Purpose and scope

(1) To ensure that all personnel are medically fit to perform their duties, and that they comply with good hygienic practices so as to prevent the contamination of products, other inputs, packaging, equipment and the processing environment.

2.2.2 General requirements and procedures

2.2.2.1 Health of personnel

(1) The operator must take reasonable measures to ensure that personnel (including any visitor or contractor) does not handle product, or enter, an area where they may adversely affect the fitness for intended purpose of product, if that person is confirmed as or suspected of suffering from being or being a carrier of a disease described in clause 2.2.2.1 (3)(a) [HC Spec 4.2 (1), AC Spec 3.19 (1)].

(2) Ensure personnel and visitors are aware of and comply with the health procedures.

(3) The operator must ensure health procedures include the following:

a) instructions for personnel to inform their supervisor or manager if they are (or suspect that they are) suffering from conditions or illnesses in column 1 of Table 1: Health Conditions and Exclusion Requirements to Resume Processing Work or other infections likely to be transmissible via food;
b) actions to take so that medically unfit personnel do not work as product handlers or enter areas where the person may adversely affect the safety or suitability of any product;
c) clearance requirements (e.g. columns 2 and 3 of Table 1: Health Conditions and Exclusion Requirements to Resume Processing Work are met) for personnel resuming work after being diagnosed with an illness mentioned in clause 2.2.2.1 (3)(a); and
d) procedures for treating injuries, wounds or cuts [RMP Spec 11, HC Spec Part 4].

Draft for Consultation

Table 1: Health conditions and exclusion requirements to resume processing work

Condition or illness	Requirements for clearance to resume processing work	
	Freedom from symptoms or illness	Medical certificate from a medical practitioner
Diarrhoea or vomiting due to gastroenteritis or other infectious diseases	Symptom-free for 48 hours.	No
Acute respiratory infection	Symptom-free for 48 hours.	Yes
Illness caused by Nontyphoidal *Salmonella, Shigella* spp., *Campylobacter, Listeria, Yersinia, Cryptosporidium, Giardia,* Norovirus and rotavirus	Symptom-free for 48 hours.	Yes

Condition or illness	Requirements for clearance to resume processing work	
	Freedom from symptoms or illness	Medical certificate from a medical practitioner
Illness caused by VTEC or STEC (verocytotoxin-producing or shiga-toxin producing *E. coli*)	48 hours and two negative stool tests at least 48 hours apart.	Yes
Illness caused by *Salmonella Typhi and Salmonella paratyphi*	If treated with antibiotics: Symptom-free for 48 hours and 2 negative stool tests at least 48 hours apart after completing the treatment. If not treated with antibiotics: No sooner than 1 month after the onset of symptoms.	Yes
Hepatitis A, cholera	Has been given clearance by a medical practitioner.	Yes
Skin infection (e.g. boils, sores, infected wounds, etc.)	Condition is assessed by the RMP Manager as no longer likely to contaminate product, or the infected area is adequately protected from being a source of contamination.	No

(4) Treat any injury, wound or cut immediately and dress with a secure waterproof dressing to prevent contamination of any product, packaging or equipment.

Guidance

Awareness and compliance with health procedures could be achieved through:

- Sickness Policy;
- PPE policy;
- pre-employment agreements;
- ongoing staff training;
- staff declarations when they resume work after extended periods of leave or premises shutdown;
- induction; and
- declarations from contractors and visitors entering the premises.

"Acute respiratory infections" are not considered to include the common cold or flu as these are not transmissible by food and a medical certificate is not required before resumption of work after suffering from these illnesses. Personnel who are unwell may be able to work but not in areas that may contaminate product.

To protect the dressing from moisture, staff should wear gloves (for wounds on the hands), and protective sleeves or clothing over wounds on the forearm.

Brightly coloured or metallised dressings are recommended as they are more likely to be detected in products if they become dislodged.

Draft for Consultation

2.2.2.2 Hygienic practices

(1) The operator must ensure that all personnel whose presence or action within work areas may result in contamination of products:

a) wear appropriate protective clothing, where necessary;

b) follow an appropriate personal hygiene routine; and
c) behave in such a manner as necessary to minimise contamination of product, other inputs, packaging and the processing environment [AP Reg 12].

(2) Procedures for personal hygiene that apply to all staff in food handling, preparation and related areas, and to all contractors and visitors must be documented and implemented [APA Section 17, AP Reg 12, RMP Spec 11].

(3) Personnel in work areas must:

a) not wear insecure jewellery; and
b) remove from their hands any jewellery that cannot be adequately sanitised [AP Reg 9 and 12].

(4) Personal items (e.g. sweets, cigarettes, false finger nails, eyelashes, etc.) must not be taken into or worn in any work areas as they may result in contamination of product [AP Reg 12].

(5) The following activities are not permitted inside work areas:

a) eating or drinking of any food;
b) smoking or vaping;
c) spitting; or
d) any other activity that may cause the contamination of any product or product contact surfaces [AP Reg 12 (c)].

2.2.2.3 Protective clothing

(1) Ensure there is a PPE policy outlining appropriate protective clothing to be worn in work areas (e.g. jackets, gloves, etc.).

Guidance

Protective gloves should be non-absorbent, and may be either single use or reusable. Disposable gloves and plastic sleeves should meet the composition and conditions of use requirements for indirect food additives (polymers) in the US Code of Federal Regulations, Title 27, Part 177, or relevant EU standard.

(2) Ensure you have procedures to make certain PPE does not become a source of contamination. This includes specific procedures for activities conducted outside work areas and staff conducting cleaning activities.

(3) Ensure footwear is suitably clean so it does not cause soil, mud, grass and other dirty material to be brought into work areas.

(4) Ensure PPE is:

a) maintained in a hygienic condition;
b) made of readily cleanable materials;
c) cleaned or changed whenever it becomes a source of contamination during packing; and
d) stored in a manner that prevents it from contamination.

(5) Ensure disposable or damaged PPE is:

a) discarded after use, when damaged (e.g. torn), or if it cannot be effectively cleaned when required during use; or
b) repaired.

(6) Prohibit the use of street clothes worn over protective clothing.

Guidance

Clean gloves before use and should be cleaned or replaced whenever gloves become contaminated (e.g. mixing maintenance compounds, etc.).

Draft for Consultation

(7) All personnel who enter any work area must wear suitable, clean protective clothing and footwear [AP Reg 12].

(8) Reusable gloves should be washed and sanitised at meal breaks, at the end of each working day, or whenever contaminated.

(9) All protective clothing and personnel equipment should be:

a) kept in good condition, changed (or in the case of waterproof clothing, cleaned) at least daily, or more often if it becomes excessively contaminated; and
b) stored so that it is protected from contamination when not in use.

2.2.2.4 Designated areas

(1) If designated areas are used, procedures for their use must be documented and implemented [RMP Spec 11].

Guidance

The purpose of designated areas is to allow staff to go outside the premises during breaks without having to change out of all protective clothing, as long as precautions are in place to minimise contamination. Protective clothing should only be worn in designated access ways or areas, and not off-site.

The designated area procedures should include:

- a description (or diagram) of the areas where protective clothing is to be worn;
- the cleaning programme for the designated areas;
- instructions for staff on the use of designated areas and conduct in those areas so that contamination of protective clothing is minimised;
- the checks to be carried out to ensure that personnel comply with the procedures; and
- the records to be kept to demonstrate compliance with these requirements.

Draft for Consultation

2.2.2.5 Hygiene routines

(1) Provide enough rubbish bins for dirty (hand) towels and empty them as soon as they become full or as appropriate.

(2) Ensure personnel handling unprotected product:

a) keep fingernails clean and short; and
b) do not wear fingernail polish or any other fingernail adornment.

(3) Manage body hair to minimise contamination of product.

Guidance

Hair
Determine your own policy on acceptable facial hair lengths. As a guide, facial hair longer than stubble would require containment.

Jewellery
Determine your own policy on jewellery. Jewellery includes earrings, rings, bangles, bracelets, brooches, necklaces, studs, exposed body piercings and wristwatches. Plain wedding rings (i.e. no stone), medical alert jewellery and cultural gifts (e.g. taonga necklace) may be worn provided they:

- will not dislodge; and
- are cleaned sufficiently in the same manner as hands.

2.2.2.6 Handwashing and sanitising

(1) All personnel must follow an appropriate hygiene routine [AP Reg 12], which includes thoroughly washing (with detergent and water), drying hands and exposed portions of the arms, and sanitising (where appropriate):

a) before handling any exposed product or packaging;
b) after using the toilet;
c) after handling or coming into contact with waste and contaminated surfaces or material; or
d) any other time when hands may become contaminated (e.g. after coughing, sneezing, and blowing the nose).

(2) After washing, hands should be thoroughly dried on:

a) disposable paper towels; or
b) 'roller' type towels which present a clean surface to each user.

Guidance

Handwashing should involve:

- washing hands and exposed portions of the arms using warm running water and soap, rubbing vigorously (e.g. front, back and between fingers); and
- drying hands and exposed portions of the arms thoroughly (e.g. front, back and between fingers).

The use of hand sanitisers is not a substitute for handwashing. When a water source is impractical to have within a certain area (e.g. in a dry work area, etc.), alternative options for sanitising personnel hands may be considered.

For more information, refer to the MPI document Handwashing and Drying – Evidence for Efficacy.

Refer to 3.5.2.1: Personnel Hygiene Equipment.

(3) Any maintenance compounds used (e.g. soaps, sanitisers, etc.) must be MPI approved and used in accordance with the manufacturers' instructions [HC Spec 3.3].

Guidance

For more information, refer to the Approved Maintenance Compounds (Dairy) Register, Approved Maintenance Compounds (Non-dairy) Register and the Approved Maintenance Compounds (Non-dairy) Manual. Refer to 6.5: Chemical Control for more information.

Draft for Consultation

2.2.2.7 Visitors and contractors

(1) Visitors and contractors who enter a work area must comply with the operator's documented health requirements and follow all hygienic practices and procedures required for product handlers [AP Reg 12].

(2) Visitors and contractors should be supervised by an assigned staff member while within the premises, unless they have been inducted and are familiar with the required hygienic practices.

2.2.2.8 Handling and disposition of contaminated materials

(1) When contamination from a worker's injury, wound or cut (e.g. blood) occurs, the following actions must be carried out:

a) affected product must be considered unfit for human or animal consumption [HC Spec 31.1 (1)];
b) affected surfaces must be cleaned and sanitised prior to reuse [AP Reg 11]; and
c) affected packaging materials that cannot be effectively cleaned and sanitised must not be used for packing of any product [HC Spec 7.2 (3)].

(2) The requirements and procedures for non-complying products (also referred to as non-conforming products) given in 6.7: Non-complying Product and Recall should be complied with.

2.2.3 Monitoring

(1) The operator must regularly check compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

2.2.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for personnel health and hygiene:

a) illness records, including sighting of medical certificates prior to personnel returning to work (when required);
b) registers for injuries; and
c) visitors' logbook.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

Draft for Consultation

2.3 Personnel competencies and training

2.3.1 Purpose and scope

(1) To ensure that all staff involved in the handling of products are competent to perform their duties, and are aware of and comply with good hygienic practices and with operating procedures.

2.3.2 General requirements and procedures

2.3.2.1 Competencies of key RMP positions

(1) The operator must identify the following (either by position, designation or name) in the RMP:

a) the Day-to-day Manager or person responsible for the day-to-day running of the RMP;
b) those person(s) who authorises all or parts of the RMP document; and
c) personnel involved in process control, corrective action and operator verification activities [RMP Spec 15 (1)].

(2) The operator must document the skills or competencies needed by the persons identified in clause 2.3.2.1 (1) to enable the effective operation of the RMP [RMP Spec 15 (2)].

(3) The RMP must provide for the keeping of records, in an easily accessible form, demonstrating that the competencies documented under 2.3.2.1 (2) have been achieved and maintained [RMP Spec 15 (3)].

(4) The Day-to-day Manager should be present at announced verification visits unless there are extenuating circumstances. A trained deputy could meet this need if required.

(5) The operator must ensure personnel performing key tasks (including monitoring, corrective action and operator verification) have the following competencies:

a) knowledge and skill in executing the particular task; and

b) an overall understanding of the area they are working in [AC Spec 3.20 (2)].

Guidance

The following competencies should be documented in relevant job descriptions:

- ensure the Day-to-day Manager or person authorising all or part of the RMP is familiar with the RMP and has:
  - knowledge of product safety relevant to stores and hygienic procedures and practices documented in this Code;
  - knowledge of regulatory requirements, including responsibilities, related to the effective implementation of the RMP;
  - technical knowledge and experience in the particular product or process; and
  - ability to liaise and communicate effectively with personnel and MPI;
- ensure the Day-to-day Manager shows evidence of upskilling through:
  - membership of relevant industry organisations;
  - subscription of relevant journals;
  - attendance at stores conferences; and
  - access to MPI advisory notes, etc.;
- ensure the person responsible for the development and review of the HACCP application within the RMP has a good understanding of the HACCP principles and how they are applied to the store's operation. Ideally, the person should have attained a recognised HACCP qualification (e.g. NZQA Unit Standard 28265); and
- ensure personnel involved in monitoring, corrective action activities and operator verification have:
  - an appropriate level of knowledge and skills in implementing their assigned tasks; and
  - a good understanding of operator verification.

For more information, refer to Operator Verification and 2.4: Operator Verification and Notifications.

Draft for Consultation

2.3.2.2 Skills maintenance and supervision of personnel

(1) The operator must ensure the ongoing maintenance of skills involved in the following:

a) process control and monitoring;
b) corrective action; and
c) operator verification [HC Spec 5.3 (1), AC Spec 3.21 (1)].

(2) The skills maintenance programme must include:

a) identification of skills and competencies listed in 2.3.2.1 (5) required for key tasks; and
b) scheduled training (e.g. induction, refresher training, etc.) [HC Spec 5.3 (2), AC Spec 3.21 (2)].

2.3.2.3 Induction and ongoing supervision of personnel

(1) Inform new personnel before starting work of:

a) their job description;
b) health requirements; and
c) hygienic practices and procedures.

(2) Ongoing supervision and/or training must be provided to ensure that new personnel are adequately trained on their specific tasks and on hygienic practices and procedures.

Guidance

Where appropriate, ensure there are clear instructions on hygienic practices (e.g. hand washing, use of protective clothing, etc.) and on operational tasks posted in the premises to re-enforce the procedures.

(3) Develop a training programme which includes:

a) the identification of skills and competencies for key roles;
b) training schedules (including refresher training); and
c) training records of personnel.

(4) Review the training programme at least annually to:

a) ensure that training remains up-to-date and effective; and
b) identify requirements for new training or refresher training (e.g. new products, equipment or processes).

Guidance

Provide any training appropriate to the nature of the person's assigned task or activity and level or responsibility. This may include induction training, regular in-house meetings, on-the-job training and external training courses.

Training for most personnel should cover:
- health and personal hygiene;
- cleaning and sanitation; and
- handling of chemicals.

2.3.3 Visitors and contractors

(1) Ensure visitors and contractors report to the responsible person on arrival at the premises. Ensure they are supervised by an assigned staff while within the premises. Ensure it is the responsibility of the assigned staff that hygienic practices and procedures are followed by the visitor or contractor.

(2) Ensure visitors and contractors are not allowed to handle exposed products in packaging and storage areas unless they have complied with all the hygiene requirements for product handlers.

Draft for Consultation

Guidance

Ensure visitors and contractors who enter a packaging or storage area:
- sign a visitor's logbook on arrival; and
- are able to declare freedom from diseases as per 2.2: Personnel Health and Hygiene.

2.3.4 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate. Refer to 2.4: Operator Verification and Notifications.

2.3.5 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for personnel competencies and training:

a) visitor's logbook;
b) individual training records including induction and skills maintenance;
c) any training materials (e.g. manuals or instructions, etc.); and
d) assessment and evidence of personnel competencies.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.2: Personnel Health and Hygiene for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

2.4 Operator verification and notifications

2.4.1 Purpose and scope

(1) To verify compliance to documented procedures and to confirm the effectiveness of the RMP by ensuring that operator verification, including internal audits, are undertaken at the required frequencies.

(2) To ensure that other operational requirements (i.e. notifications and amendments) are met by the operator.

2.4.2 General requirements and procedures

(1) The operator must document operator verification procedures in an RMP including:

a) the activities to be performed and their frequency (e.g. Table 2: Operator Verification Activities and Frequencies);
b) procedures or methods used (who, what, when, where, how);
c) the use of suitably skilled personnel to undertake operator verification activities and, wherever possible, such personnel are independent of the activities being verified;
d) any actions to be taken when there is a non-compliance and where the RMP is ineffective;
e) trend analysis; and
f) any recording and reporting requirements [HC Spec 27.2 (1), AC Spec 3.26 (1)].

Draft for Consultation

Table 2: Operator verification activities and frequencies

Activity	Details	Frequency
Record checks	• Collect all records and check they are completed, correctly filled out, and that all results are acceptable or the appropriate corrective action has been taken and documented. • Review to identify any trends, new hazards, or recurring problems.	• When completed.
Personnel supervision	• Ensure that all personnel are following correct practices and procedures.	• As required.
Review of RMP	• Read through the RMP and amend it where necessary. • Perform a reality check to ensure documented procedures are followed. • Test your recall plan by conducting a mock recall(s). • Significant amendments will need to be evaluated and registered.	• At least annually. • When procedures or premises change. • When RMP is not working effectively.

(2) The operator must include regular checks of:

a) facilities and equipment;
b) personnel; and
c) practices, procedures and activities [HC Spec 27.2 (2), AC Spec 3.26 (2)].

Guidance

Operator verification includes several types of activities that together will provide the operator (and RMP verifier) with confidence that the RMP and GOP are working effectively. Operator verification activities are not restricted to internal audits by the operator. Although internal audits are important, they need to be completed in conjunction with information from the day-to-day operator of the process.

For more information, refer to Guidance Document: Operator Verification.

Daily and/or ongoing operator verification activities

Daily and/or ongoing operator verification activities should include:

- routine surveillance and monitoring checks (e.g. dairy process control, etc.);
- reality checks of storage areas;
- monitoring record reviews;
- general oversight and supervision of the operation; and
- identifying issues and transferring those to the corrective action system if necessary.

Scheduled operator verification activities

- **Internal audits**: usually an operator will carry out an annual internal audit of the whole RMP. Where an operator chooses to have a series of 'mini-audits' an RMP operator should have a schedule of internal audits which covers all systems at least annually.
- **RMP review**: usually an RMP operator will review the RMP at least annually. The RMP review considers whether there have been any significant changes (e.g. to the process, equipment, building, products, staff in positions of responsibility, RMP verifier, etc.).
- **HACCP plan review**: usually an RMP operator will review the HACCP plan(s) at least annually. The review considers whether there have been any changes (e.g. to the process flow, inputs or outputs, new hazards, etc.).

All three of these activities can be combined into one activity.

Corrective action system

A central register for all non-compliances will simplify tracking of corrective and preventative actions. Identifying the 'root cause' of defects or issues will ensure that corrective actions are effective. Repetitive issues may result from:

- poorly maintained equipment or processing environment;
- poor control of the process;
- inadequately trained personnel;
- lack of resourcing;
- lack of supervision; or
- poor standard of operator verification.

Draft for Consultation

2.4.2.1 Scope and frequency of internal audit

(1) The operator should document and implement an internal audit programme.

(2) The operator must ensure internal audits are carried out by a suitably skilled person at a frequency sufficient to:

a) ensure ongoing compliance with documented RMP procedures; and
b) enable prompt identification of any problem [RMP Spec 15 (1)(c)].

(3) The operator must ensure appropriate corrective action is taken when problems are found [RMP Spec 16 (1)].

(4) The operator must keep records of observations made during the internal audit and corrective actions taken [RMP Spec 20 (2)].

Guidance

Ensure internal audits consist of the following:
- person(s) responsible for conducting the audit;
- audit schedule specifying when each programme is to be checked, considering seasonal activities and risk;
- audit process;
- a review of written procedures;
- review of records and trend analysis;
- reality checks during processing;
- external audit findings;
- confirmation that deficiencies or non-compliances identified from the last internal audit have been rectified; and
- a clear description of when corrective and preventative action should be taken and what corrective and preventative action is expected.

Ensure the person responsible for undertaking internal audits has:
- auditing skills;
- a good understanding of the operations, processes and GOP covered by the RMP;
- independence from the procedures being audited as much as possible; and
- a good understanding of relevant regulatory requirements.

Determine the frequency of internal audits for the different parts of the RMP programmes, considering various factors such as:
- the importance of the particular programme on product safety, suitability and hygienic operations;
- the frequency of non-compliances;
- the effectiveness of the programme; and
- skills and training of personnel implementing the particular programme.

Increase the frequency of audits when repetitive non-compliances occur or the programme is found to be ineffective.

The internal audit(s) could include a trial run or mock recall. Refer to 6.7: Non-complying Product and Recall.

Draft for Consultation

2.4.2.2 Internal audit procedures

(1) Observations made during internal audits and corrective actions taken must be recorded [RMP Spec 16 (1)].

(2) Ensure the following actions take place when ongoing or recurring non-compliances occur:

a) investigate to determine possible causes of non-compliance;
b) take appropriate corrective actions to regain control and prevent recurrence of the problem;
c) increase surveillance of the system; and
d) review the RMP or the relevant GOP programme and make necessary changes.

(3) Ensure a review of relevant parts of the RMP is carried out when:

a) a major change is made to a product, process or the premises; or

b) there are indicators (e.g. process failures, repetitive non-compliances, negative trends or unacceptable RMP verification audits) that certain programmes or procedures are ineffective.

(4) Significant amendments to the RMP must be evaluated and registered [RMP Spec 22].

Guidance

Internal audits should consist of a review of records, reality checks, and confirmation that deficiencies or non-compliances identified from the last audit have been rectified.

Review written procedures and update to ensure that they:
- are up-to-date with current legislation and standards; and
- reflect actual operations.

Review records for:
- completeness and accuracy of required information;
- documentation of corrective actions;
- any trends, new hazards, recurring problems; and
- compliance with documented control procedures.

Ensure the person performing the audit signs the records (or indicate in some other way) that the records have been subject to an internal audit.

Reality checks should include observations of:
- personnel's performance and compliance with documented hygienic procedures and operating procedures;
- compliance with process parameters such as processing times and temperatures; and
- hygienic status of the premises internal and external environment, facilities and equipment.

Follow up all deficiencies found at previous audits using the corrective action system.

For more information on significant amendments to the RMP, refer to the RMP Manual.

Draft for Consultation

2.4.2.3 Notification procedures

(1) The operator must notify the Director-General in writing, without unnecessary delay, of any change to the name or position or designation of the person(s) responsible for the day-to-day management of the RMP [RMP Spec 13 (1)].

(2) The operator must document procedures for notifying the Director-General of any emerging, new or exotic biological hazards or new chemical hazards that come to the operator's attention in relation to the RMP without unnecessary delay [RMP Spec 13 (2)].

(3) The operator must document procedures for notifying the recognised RMP verifying agency in writing, without unnecessary delay, of the following issues relating to the operation of the RMP:

a) any significant concern about the fitness for intended purpose of any product;
b) where the cumulative effect of minor amendments necessitates the registration of a significant amendment to the RMP;
c) where the RMP is considered to be no longer effective;
d) where the premises are not or are no longer suitable for their use; and
e) where anything within the physical boundaries of the RMP is used for additional purposes or by other operators and the RMP has not adequately considered relevant hazards or other risk factors [RMP Spec 13 (3)].

(4) The operator must ensure their RMP is amended when:

a) making major amendments to the processing facilities or equipment and sometimes the boundaries;
b) setting up a new process or process modification that is not covered by the RMP, except:
    i) where the process or process modification is similar to existing processes; and
    ii) a documented risk factor identification and hazard analysis has shown that all risk factors associated with that process are already adequately addressed by the RMP;
c) making any other changes that introduce new risk factors, or adversely impact on existing risk factors;
d) merging two or more registered RMPs;
e) splitting a registered RMP into two or more RMPs; and
f) adding a business to a multi-business RMP except where the Director-General's approval under section 17A of the Act applies to a type of business, premises or place rather than to specific businesses [RMP Spec 22].

(5) The Day-to-day Manager of the RMP must notify the recognised RMP verifying agency in writing (e.g. by email or letter) as required by and for reasons specified in RMP Spec 13 (3).

Guidance

If you need to amend your RMP, the amendment will either be classified as significant or minor. Information on amending an RMP can be found in the RMP Manual.

If you are considering more activities, check with export requirements (e.g. OMARs) if those activities can be undertaken within your RMP.

Export non-compliances
Guidance on notifying export non-compliances (ENC) can be found on the MPI website or search on "ENC". This includes raising an ENC for export product where appropriate.

Draft for Consultation

2.4.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

2.4.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for operator verification and notifications:

a) internal audit reports;
b) other information or evidence relating to operator verification activities (e.g. test results, etc.); and
c) copies of any communication sent to MPI or the recognised RMP verifying agency.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

2.5 Corrective action

2.5.1 Purpose and scope

(1) To ensure if problems occur, they are managed appropriately (e.g. restoration of control, product disposition and prevention of recurrence, etc.).

2.5.2 General requirements and procedures

(1) The operator must ensure that corrective actions for any non-conformances or non-compliance include an assessment to determine the cause and extent of the issue and address:

a) immediate restoration of control;
b) identification and disposition of any affected product; and
c) prevention or recurrence of the problem [RMP Spec 11 (2)].

(2) Identify the root cause(s) of the problem and address these by the corrective actions.

(3) Ensure corrective actions are carried out in an effective and timely manner.

(4) Maintain a register of corrective actions, including follow-up checks (e.g. internal audits, other operator verification activities, external audits, etc.).

(5) Categorise or rank issues based on their potential effect on product contamination and product safety.

(6) The operator must ensure compliance with requirements and procedures is regularly checked (e.g. monthly, etc.) by the responsible person at a frequency that will ensure consistent and ongoing effectiveness of the programme [RMP Spec 16 (1)].

Guidance

Refer to 6.7: Non-complying Product and Recall for further information on managing non-compliances of products.

Refer to 2.4: Operator Verification and Notifications.

Set timeframes for performing corrective actions (e.g. within 1 month, etc.).

Examples of managing the risk to product caused by an issue or non-compliance could include:
- continually monitoring re-packing to ensure the risk to product is minimal; or
- preventing defective equipment from being used until repair can take place.

2.5.2.1 Extenuating circumstances

Guidance

Extenuating circumstances may include:
- unforeseen events (e.g. floods, fires, earthquakes, pandemic situations (i.e. COVID-19), etc.);
- replacement equipment and parts not being immediately available;
- unavailability of contractors;
- boil water notice for council supplied water; or
- power failure.

(1) Ensure any issue is managed appropriately and risk to product is minimised.

(2) Report the following to the RMP verifier:

a) a description of the problem and any affected product;
b) a summary of the assessment made; and
c) any corrective actions taken to prevent the recurrence of the non-compliance.

Draft for Consultation

2.5.2.2 Preventative actions

(1) Preventative actions to minimise the occurrence of non-conformance or non-compliance may include:

a) amending the documented programmes to correct deficiencies;
b) increasing the frequency of inspections or internal audits;
c) revising supervision or training programmes when staff, visitors or contractors are not following GOP as required;
d) managing repeat offenders; and
e) a series of escalating responses for repetitive non-conformances.

2.5.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

2.5.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for corrective actions:

a) trend assessments of monitoring;
b) non-complying product criteria decisions (i.e. direction from product owner); and
c) any reports given to the RMP verifier.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.4: Operator Verification and Notifications for requirements.
Refer to 6.7: Non-complying Product and Recall for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

Draft for Consultation

Part 3: Design, construction and maintenance of buildings, facilities and equipment

3.1 Overview

3.1.1 Purpose and scope

(1) To ensure that all buildings, storage facilities, refrigeration units, and equipment are designed, constructed, installed and operated in a manner that prevents or minimises contamination of products, packaging, equipment, and the storage environment.

3.1.2 General requirements

3.1.2.1 References applicable to design and construction

(1) A summary of additional references applicable to the design and construction of premises are listed below. This list is not exhaustive. Refer to your local council in the first instance for, e.g. resource consent.

a) building requirements and codes;
b) drinking water standards;
c) health and safety; and
d) Resource Management Act.

3.1.2.2 Site location

(1) Premises should be located away from:

a) environmentally polluted areas and industrial activities which pose a serious threat of contaminating product;
b) areas subject to flooding, unless sufficient safeguards are provided;
c) areas prone to infestation of pests; and/or
d) areas where wastes, either solid or liquid, cannot be effectively removed.

(2) Transport access ways, and areas between and around buildings, must be constructed and maintained so that they drain surface water, and minimise dust and other environmental contamination [AP Reg 10].

Draft for Consultation

3.1.2.3 Site layout

(1) Ensure the layout of the site is suitable for the intended operations of the premises.

(2) Provide, where appropriate, adequate:

a) suitable water and energy supply to ensure all activities can be carried out efficiently;
b) waste and effluent disposal systems; and
c) vehicle access ways, constructed and maintained so that they drain surface water and do not create dust and other environmental contamination.

3.1.2.4 Site considerations

(1) Consider the following factors in site selection:

a) fuel storage and handling facilities;
b) staff access and amenities;
c) winds;
d) future possible expansion;
e) flood plains;
f) neighbouring industries and facilities;

g) ventilation and process air intakes; and
h) vehicle access.

3.2 Building design and construction

3.2.1 Purpose and scope

(1) To ensure that all buildings and facilities are designed, constructed and maintained in a manner that prevents or minimises contamination of products.

(2) Refer to 3.5: Equipment and Part 4: Repairs and Maintenance which are detailed separately.

(3) To ensure essential services are designed, constructed and maintained in a manner that minimises contamination of product.

(4) Refer to 3.4: Suitable Water for suitable water. It is an essential service but is described separately.

(5) To ensure design and construction of amenities (e.g. toilets, wash rooms, locker rooms, change rooms, lunch rooms and cafeterias, etc.) are fit for intended purpose.

3.2.2 General requirements and procedures

(1) The operator must ensure the premises, facilities, equipment and essential services are designed, constructed, located and operated in a manner that:

a) enables the suitability of any product to be maintained;
b) enables the fitness for intended purpose of product to be achieved and maintained; and
c) minimises and manages the exposure of any product, packaging, equipment, processing and storage environment to hazards and other risk factors [AP Reg 10].

(2) Obtain advice from a competent person on the design of new premises and alterations to existing premises that substantially affect the sanitary environment of the premises.

(3) The operator must ensure that premises or place, facilities, equipment and internal structures that may affect the fitness for intended purpose of product, is of sanitary design by making sure any material or exposed internal surface is:

a) impervious, non-absorbent, and free from depressions, pits, cracks, and crevices that may harbour contaminants;
b) easily cleaned and sanitised;
c) unaffected by a corrosive substance with which it is likely to come into contact, to the extent necessary to ensure that it will not harbour contaminants and is not a source of contamination;
d) durable, resistant to fracture, and capable of withstanding repeated exposure to normal cleaning and sanitising;
e) in the case of surfaces (other than those used for walking or standing on during operations), are smooth and minimise the accumulation of condensation; and
f) in the case of material lining the walls, floors and ceilings, are of a colour that does not disguise contaminants having regard to the lighting arrangements [HC Spec 2.2 (1), AC Spec 3.2 (1)].

(4) The operator must ensure premises, facilities, equipment and essential services are designed, constructed and maintained in a manner that prevents access of pests [HC Spec 2.2 (2), AC Spec 3.2 (2)].

(5) Seal or cover holes, drains and other places where pests are likely to gain access, with screens or similar materials (pest exclusion devices) that restrict the entry of pests.

(6) Keep internal and external areas of the premises clean and tidy.

(7) Regularly check the external environment is kept free of any food and pest breeding sites (e.g. long grass, bird's nest, accumulated waste, etc.).

Draft for Consultation

Guidance

Refer to 6.6: Pest Control for more detailed information regarding managing pests in the storage area.

3.2.2.1 Design and layout

(1) The internal design and layout of premises should permit good hygienic practices, including protection against contamination of product between and during operations.

(2) Equip the premises, where required, with an adequate number of hose connection points to enable effective cleaning.

(3) Provide adequate working space to allow for the following:

a) the hygienic performance of all operations;
b) personnel flow and access;
c) effective cleaning;
d) product flow;
e) equipment installation;
f) storage;
g) access of materials; and
h) effective monitoring and verification of activities.

3.2.2.2 Facilities and internal structures

(1) Storage facilities must be designed and constructed to:

a) permit adequate maintenance and cleaning;
b) avoid pest access and harbourage;
c) enable products to be effectively protected from contamination during storage; and
d) where necessary, provide an environment that minimises the deterioration of products (e.g. by temperature and humidity control) [AP Reg 10, HC Spec 2.2 and 2.3].

(2) The surfaces of walls, partitions and floors that are subject to wet cleaning must be constructed of impervious material, be easily and effectively cleaned, and facilitate the drainage or removal of water [HC Spec 2.2 (1)].

(3) Internal structures and fittings must be soundly built of durable materials and be easy to maintain, clean and, where appropriate, can be disinfected [DPC 4 (4)].

3.2.2.3 Protrusions within the walls, ceiling or floors

(1) Ensure that fittings and services such as pipes, wiring, ducting and trunking which pass through walls, ceilings or floors, are:

a) flashed and sealed to eliminate gaps on both the interior and exterior surfaces to prevent water seepage, and harbourage and entry of pipes;
b) constructed to prevent accumulation of dust and contaminants; and
c) effectively cleaned at the frequency required for the function of the room or area.

(2) Ensure insulation materials on pipes within food areas and food support areas:

a) do not pose a risk to the safety of products; and
b) are able to be adequately cleaned under the normal conditions of use.

(3) Walls and partitions should have a smooth surface up to a height appropriate to the operation [DPC 4 (6.6)].

(4) Ceilings and overhead fixtures should be constructed to minimise the build-up of dirt and condensation, and the shedding of particles [AP Reg 9].

(5) Facilities should be designed to provide separation, by partition, location, or other effective means, between products and other materials that may cause contamination of any product (e.g. cleaning

Draft for Consultation

materials, hazardous substances, non-food materials, waste, etc.).

Guidance

Common practices used to provide separation are typically categorised into the following:

- **separation by distance**: to separate to such an extent so as to avoid any possible contact, splash, contamination etc., between specific functions, processes or personnel.
- **separation physically**: to separate by floor to ceiling solid walls and doors, or to fully protect product or by-product pipelines, enclosed vats, etc.
- **separation by time**: to end one function or process prior to starting a different function or process, and if necessary to avoid contamination with a cleaning operation in between.

3.2.2.4 Floors

(1) Ensure floors are installed and maintained to eliminate all cracks, open joints, depressions or other low areas that would accumulate moisture or harbour contamination.

(2) Seal or cover holes, drains and other places where pests are likely to gain access, with screens or similar materials (pest exclusion devices) that restrict the entry of pests.

Guidance

Ideally, floors subject to wet cleaning should be adequately graded and free-draining. A wet and dry vacuum cleaner and using a de-humidifier helps to ensure any wet floors dry sufficiently.

Acceptable materials and design considerations

- commonly used acceptable materials should be sealed concrete or another non-toxic substance impervious to liquids and acid resistant;
- floors should be smooth (as rough surface will trap small amounts of water and will eventually go mouldy);
- as a safety precaution, excessively smooth floors should be avoided in areas subject to wet cleaning;
- ideally, floors should be sloped so that water will run off to floor drains. Floor falls of 1 in 50 have been found to work well in wet work areas. Wash areas normally have a 1 in 25 fall;
- floor junction coving to a radius of 80 mm have been found to work well in wet cleaning areas;
- suitable floor joint sealants that can be used are polyurethane or polysulfone epoxy mastic; and
- suitable drainage should be provided so that any discharge or overspill from work areas goes directly into a drain rather than on the floor.

Draft for Consultation

3.2.2.5Windows

(1) Windows must be easy to clean, constructed to minimise the build-up of dirt and where necessary, fitted with removable and cleanable pest-proof screens. Where necessary, windows should be fixed [DPC 4 9].

(2) Ensure windows are flush with the inside surface of the wall.

(3) Ensure glass windows are not used where glass could contaminate products if the window breaks.

Guidance

Sloped window sills, with an inside ledge, downwards at an angle to prevent the build-up of dust and to facilitate effective cleaning. Angling a window ledge to at least 45° has been found to work well.

Keep windows shut where dust could be an issue.

Using safety glasses is a good alternative to standard glass.

3.2.2.6 Doors

(1) Install doors where their opening and closing from external surroundings or other areas of lower hygiene status (e.g. waste area, etc.) will not result in contamination of products or packaging.

(2) Ensure all doors opening from the exterior or by-product areas directly to food areas or food support areas are, as far as practicable, self-closing.

(3) Doors must have smooth, non-absorbent surfaces, and must be easy to clean and, where necessary, disinfect [HC Spec 2.2 (1)].

(4) Ensure doors are properly sealed to prevent water seepage, harbourage and entry of pests and contamination from external environments.

(5) Minimise the time doors are opened for traffic to reduce contamination from external areas.

Guidance

Doors in areas where work is carried out should not open directly to the outside environment. An ante-room is recommended for providing two doors between the work room and the outside.

Self-closing doors reduce the risk of contamination. An ante-room would be an acceptable substitute for a self-closing door.

Dedicated emergency exits are considered doors.

Air curtains in doorways are not regarded as doors and should not introduce contamination.

Draft for Consultation

3.2.2.7 Plastic strips

(1) Ensure plastic strips used in doorways are:

a) installed with sufficient overlap to provide continuous coverage; and
b) maintained in a clean and good working condition.

Guidance

Use plastic strips in doorways as the only entry to food areas and food support areas provided they are fit for intended purpose and do not open directly to the exterior or to by-product or other non-product areas.

3.2.2.8 Stairs, decks and walkways

(1) Ensure where stairs, decks and walkways are located over exposed products, or product contact surfaces, they are constructed of impervious material with solid treads and closed risers to prevent contamination of food by splash or fallout.

(2) Construct all stairs, decks and walkways to prevent the pooling of water. These should be sloped to drain points. Refer to 3.3.2.4: Drainage.

Guidance

Try side curbs at least 150 mm high measured at the front edge of the treads, they have been found to work well.

Use open grid type stairs, decks and walkways where the process is fully enclosed and there is no danger of product being contaminated.

3.2.2.9 Cross-contamination

(1) The operator must design buildings and facilities to provide separation, by partition, location or other effective means, between operations (including waste disposal) that may cause contamination of products [AP Reg 9 and 10].

(2) Separation should be provided, whenever possible, between the following functions:

a) handling of unprocessed and processed product where there is a potential for cross-contamination;
b) storage of different product types where necessary;
c) re-packing; and
d) unprotected product and by-product storage and transportation.

(3) Premises layout should separate, as appropriate, high and low risk materials, processes and the personnel working with them.

(4) Facilities should be designed to provide separation, by partition, location, or other effective means, between products and other materials that may cause contamination of any product (e.g. cleaning materials, hazardous substances, non-food materials, waste, etc.).

Guidance

Common practices used to control personnel flows (refer to 3.2.2.10: Process Flows) and access, and to provide separation are typically categorised into the following:

- **separation by distance**: to separate to such an extent to avoid any possible contact, splash, contamination etc., between specific functions, processes or personnel.
- **separation physically**: to separate by floor to ceiling solid walls and doors, or to fully protect product or by-product pipelines, enclosed vats, etc.
- **separation by time**: to end one function or process prior to starting a different function or process, and if necessary to avoid contamination with a cleaning operation in between.

Consider all points of cross-contamination that may occur in the RMP premises and ensure that measures are in place to manage the hazards (e.g. consider environmental risks from neighbouring properties, etc.).

Draft for Consultation

3.2.2.10 Process flows

(1) Design buildings and facilities to facilitate hygienic operations by means of an organised process flow from the arrival of the raw material to the premises, to the finished food or by-product.

Guidance

Design buildings, services and equipment around the process flow path. Implement the principle of one-way-flow of food or by-products wherever possible.

Without good sanitary design at the onset, food safety and sanitation programmes can be less effective and become compromised. Problems such as food poisoning, spoilage, pest infestations and foreign matter contaminations are more likely to occur.

3.2.2.11 Refrigeration facilities and equipment

(1) Refrigeration facilities must be designed for the maximum capacity likely to be processed or held on the premises at any one time [HC Spec 2.3 (2), AC Spec 3.3 (2)].

(2) Facilities for chilling or freezing products must be designed and constructed to enable products to be reduced to the temperature, within a prescribed time, appropriate to the product and process [HC Spec 2.3 (2)].

(3) Refrigeration facilities should be designed and constructed to ensure that condensation drip on to products or equipment is minimised.

(4) Equipment for the control and accurate monitoring of temperatures and other refrigeration parameters (e.g. humidity, air-flow, etc.) must be provided and must operate at all times while refrigeration facilities are in use [DPC 4 11].

(5) Temperature sensors should be maintained so they accurately monitor the temperature within a room using a sufficient number to monitor the temperature range in different parts of the room.

(6) Chiller and cold store temperatures should be monitored by calibrated automatic temperature recording equipment.

Guidance

For chillers, the room temperature should be recorded at intervals of no greater than 1 hour. For cold stores, the interval should be no greater than 4 hours.

(7) Cold stores must be designed, constructed and operated to ensure that frozen products, other than live fish or bivalve molluscan shellfish (BMS), are:

a) maintained at -12°C or colder during storage and loading [HC Spec 18.16 (2)]; and
b) frozen fish and fish products must be maintained at -18°C or colder [HC Spec 18.16 (2)].

Guidance

For more information, refer to Table 2: Allowable Temperatures for Release from Primary Processing Operations and Schedule 4: Specifications for the Transfer of Product that has not reached its Preservation Temperature for Red Meat in the HC Specs.

(8) Chillers or freezers using a common refrigerated air supply with cold stores should comply with the following requirements:

a) cold stores should be physically separated from the chiller or freezer by floor to ceiling walls;
b) insulation should be adequate to minimise heat transfer between the chiller or freezer and the cold store;
c) when a chiller or freezer is used to refrigerate unprotected products, the inlet air from the cold store, if used to store packaged food, should be adequately filtered to remove any dust or contaminants prior to release into the chiller or freezer;
d) exhaust air from the chiller or freezer should not be released directly back into the cold store; and
e) the design and performance of the refrigeration system should be validated by an independent refrigeration consultant.

Draft for Consultation

Guidance

Exhaust air can be dealt with one of the following techniques:
- discarded directly to the exterior environment;
- ducted directly to the air inlet of the evaporator unit in the cold store room; or
- reduced to the temperature of the cold store room via a heat exchanger prior to return to the cold store room.

3.2.2.12 Facilities

(1) Dedicated areas should be provided for the following:

a) storage of cleaning equipment;
b) storage and/or preparation of maintenance compounds;
c) storage and/or make-up of packaging materials; and
d) storage of PPE when personnel are not in processing or re-packing areas.

(2) Provide hygienic facilities appropriate to the nature of the process.

(3) Ensure packaging material facilities are able to store packaging materials off the floor.

(4) Ensure wet cleaning facilities have an adequate supply of hot and cold suitable water.

(5) Provide PPE at personnel entry points to product work areas (e.g. at wash hand basins, etc.).

Guidance

A dedicated area could be a room or simply a cupboard, dependent upon the requirements of the premises.

Steam and splash from wash water or cleaning chemicals are a potential source of contamination to products being processed, packed, stored or transported.

Ensure cold water is suitable for cleaning work areas and equipment. Hot water should be at least 60°C for sanitation.

Refer to 6.2: Storage for more information on storing packaging.

3.2.2.13 Loading facilities

(1) Loading facilities must be designed and constructed to protect food from environmental hazards and to ensure maintenance of the temperature of food during load-in or load-out [HC Spec 26.4 (5) and 26.5 (2)].

Guidance

Loading facilities for protected food should be provided with a canopy.

Protection for unprotected food should be provided by means of sealed docking bays or fully enclosed environmental loading facilities.

3.2.2.14 Detain facilities

(1) Clearly identified detain facilities should be provided for the secure handling of detained refrigerated and non-refrigerated product, when required.

3.2.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

3.2.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for building design and construction:

a) repairs and maintenance activities and systems;
b) site plan with the RMP boundary;
c) any building reports; and
d) internal audit reports.

These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Draft for Consultation

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.4: Operator Verification and Notifications for requirements.
Refer to Part 4: Repairs and Maintenance for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

3.3 Essential services

3.3.1 Purpose and scope

(1) Maintain on-site services that affect the storage of safe and suitable product. This includes water reticulation systems, waste water and sewage systems, and electricity supply (where appropriate).

(2) Service maintenance should be part of the programmed maintenance schedule.

3.3.2 General requirements and procedures

3.3.2.1 Lighting

(1) The operator must ensure lighting is designed, constructed and located to minimise contamination in the event of breakage [HC Spec 2.4 (1)].

(2) The operator must ensure that lighting is of a sufficient intensity and quality to enable the satisfactory performance of all operations that might affect the fitness for intended purpose of product [HC Spec 2.4 (2), AC Spec 3.4 (1)].

(3) Ensure light bulbs, fixtures, skylights, or other glass are of the safety type, LEDs or otherwise protected (e.g. covers to prevent contamination in the event of breakage), if over:

a) products;
b) exposed packaging material; or
c) equipment.

(4) The operator should ensure illumination levels comply with the relevant provisions of AS/NZS 1608.2.4:1997 Interior Lighting – Part 2.4: Industrial tasks and Processes. Refer to Table 3: Acceptable Lighting Intensities below.

Draft for Consultation

Table 3: Acceptable lighting intensities

Facility	Lux
Staff rooms, changing rooms, locker rooms, cleaners' rooms, lavatories, measured at the floor	150
Stores and loading bays with infrequent access, measured for identification of labels	150
Stores with constant operation, breakdown, make-up, despatch measured at the floor aisles	300
Processing rooms, measured at working plane	500
Areas where products are prepared to inspection standards, measured at the working plane	750
Areas where quality control inspection is performed, measured at the working plane	1,000

3.3.2.2 Ventilation

(1) Ensure ventilation systems are designed and constructed to ensure that air flows from food areas to non-food areas.

(2) Natural or mechanical ventilation should be provided to:

a) minimise air-borne contamination of products (e.g. from aerosols and condensation droplets);
b) control ambient temperatures;
c) control odours, dust, vapours, or smoke which might affect the product's fitness for intended purpose; and
d) control humidity, where necessary, to ensure the safety and suitability of products [DPC 4 14].

Guidance

Design ventilation systems to take into account factors such as:

- the size of the premises;
- the number of persons working within food areas;
- heat gain (e.g. from equipment or product load);
- water emission;
- relative humidity;
- condensation; and
- general climatic conditions.

Ensure air intakes are located and constructed so that contamination from exhaust stacks, roof-deposited debris (e.g. faecal material from wild birds, etc.) or other environmental contamination cannot be taken into the process area. Provide air intakes to food areas with an effective filtration stage.

Ensure filters are:

- capable of withholding particles that have the potential to cause contamination of the products and process environment; and
- readily removable for replacement or cleaning.

Choose the filter in accordance with the conditions of use. Consider the type of the product, process, size, nature and concentration of the particulate matter to be removed.

Draft for Consultation

3.3.2.3 Water treatment systems

(1) Ensure automatic water chlorination systems are fitted with alarm devices that indicate when the chlorination systems has ceased to function correctly.

(2) Ensure ultraviolet (UV) light water disinfection systems are fitted with monitoring and alarm systems to automatically shut down the water supply to the UV water treatment unit in the event of:

a) power failure to the treatment unit;
b) lamp failure of the treatment unit; and
c) excessive water turbidity.

(3) Fit novel or alternative approved water treatment systems with an appropriate monitoring and alarm system.

3.3.2.4 Drainage

(1) Ensure drainage systems are designed, constructed and located to:

a) effectively remove solid and liquid waste;
b) prevent odours, pests, other objectionable material and storm water from entering the premises; and
c) prevent contamination of products, packaging and equipment from aerosols and splashes from drains.

(2) Ensure drains are positioned and of sufficient capacity (e.g. size and fall) to ensure liquid and solid waste is contained and rapidly removed to minimise the spread of waste across floors.

(3) Ensure effluent and sewage is contained and disposed of hygienically and by means that prevent the contamination of suitable water supplies and food.

Guidance

Ensure channel drains are of sufficient size and suitable fall to allow self-draining and ease of cleaning.

Ensure the drainage system is also designed to accommodate the possibility of future alterations to room functions and process room layouts.

Drainage lines should not pass from dirty to clean work areas. Consider the flow in the process flow design of the plant, so drains do not flow from areas of high contamination to areas of low contamination. Refer to 3.2.2.9: Cross-contamination and 3.2.2.10: Process Flows.

Ensure sewage lines from toilets and urinals are not connected with any drainage lines within the premises and do not discharge into sumps from which any recovery for further processing is done.

To prevent the possibility of any sanitary drainage backing up and entering the premises, sewerage lines should either be:

- directed to an adequate septic system located a safe distance from any processing building; or
- discharged into the local sewerage system at a point sufficiently remote from the premises.

3.3.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

3.3.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for essential services:

a) repairs and maintenance activities and systems;
b) site plan with the RMP boundary; and
c) internal audit reports.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.4: Operator Verification and Notifications for requirements.
Refer to Part 4: Repairs and Maintenance for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

Draft for Consultation

3.4 Suitable water

3.4.1 Purpose and scope

(1) To ensure that adequate supply of water is available for hygienic operations so as to minimise contamination and maintain the fitness for intended purpose of products.

3.4.2 General requirements and procedures

(1) The operator must ensure that water (including ice and steam) that comes into indirect contact with product is suitable water [HC Spec 2.5.1 (1)].

(2) Despite clause 3.4.2 (1) the operator may use an alternative water quality standard as determined by the operator provided:

a) the water quality standard is determined by an analysis of hazards and other risk factors;
b) the fitness for intended purpose of product is not adversely affected; and
c) a re-assessment is undertaken in the event if changes occur that may affect the suitability of the water for its intended purpose [HC Spec 2.5.1 (2)].

(3) The operator must ensure that water that does not come into direct contact with product does meet the requirements of clause 3.4.2 (1), or may meet an alternative non-contact water quality standard [HC Spec 2.5.2 (1)]. Refer to 3.4.2.2 Non-contact Water.

(4) The operator supplying suitable water solely for their own use, within a premises or place, must assess all their water sources (e.g. bore water, rain water, river water, etc.) and demonstrate that the supplied water is suitable for use in storage of product [HC Spec 2.5.5 (1)].

(5) The operator must complete the assessment referred to in Schedule 1: Specification for Suitable Water Supplied by the Operator as part of the RMP before storage commences using that supply or if changes occur [HC Spec 2.5.5 (2)].

(6) If ongoing monitoring of water suitability shows that any of the requirements in Schedule 1: Specification for Suitable Water Supplied by the Operator Table 1: Quality of Suitably Water (or own additional criteria as per Water Supply Assessment Checklist) are not met, the operator must cease all operations where water comes into direct or indirect contact with product until the problem is rectified and suitable water is available again [HC Spec 2.5.5 (3)].

3.4.2.1 Supply

(1) Adequate supply of suitable water must be available and used for:

a) cleaning and sanitation;
b) personnel hygiene activities; and
c) any other activity wherein water comes into direct contact with product [AP Reg 10].

(2) To ensure the safety and suitability of product and the hygienic operation of the premises, the following should be available:

a) an adequate supply, volume and pressure of suitable water; and
b) appropriate facilities for its storage, distribution and temperature control.

3.4.2.2 Non-contact water

(1) If an alternative non-contact water quality standard is used, the appropriate standard must be determined for suitability by the operator:

a) by an analysis of hazards and other risk factors; and
b) taking into consideration the intended use of the water [HC Spec 2.5.2 (2)].

Draft for Consultation

Guidance

The operator should be aware that requirements relating to non-contact water also applies to water used for handwashing and other personnel hygiene activities.

(2) The operator must identify the use of non-contact water in the water management plan [HC Spec 2.5.4].

(3) Only use non-contact water, of a standard that does not risk the safety and suitability of the product, and is satisfactory to the RMP evaluator, in the following situations:

a) firefighting;
b) toilets and urinals;
c) cleaning paved areas, roadways, truck turning aprons, etc.:
d) conveying and washing of inedible material;
e) washing down sumps and external drains; and
f) facilities such as bulk stores.

(4) Ensure every water line conveying non-contact water is:

a) separate from suitable water lines, unless the connection is required for firefighting purposes;
b) clearly identified at all outlets and any other place where identification is necessary; and
c) connected in a manner that prevents contamination of suitable water supply.

3.4.2.3 Summary of requirements for water from different sources

(1) Evidence demonstrating compliance to suitable water requirements is available in Table 4: Summary of Requirements for Water from Different Sources.

Table 4: Summary of requirements for water from different sources

Water supplier	Requirements
Town supply or other independent supply with no additional treatment[1] by operator	• 3.4.2.4: Water Management for all Types or Sources of Water. • 3.4.2.7: Water Reticulation Management Plan.
Town supply or other independent supply with additional treatment[1] by operator	• 3.4.2.4: Water Management for all Types or Sources of Water. • 3.4.2.5: Water Treatment. • 3.4.2.6: Water Analyses. • 3.4.2.7: Water Reticulation Management Plan.
Operator's own supply (e.g. water sourced from a bore, river, stream, roof, etc.)	• 3.4.2.4: Water Management for all Types or Sources of Water. • 3.4.2.5: Water Treatment. • 3.4.2.6: Water Analyses. • 3.4.2.7: Water Reticulation Management Plan.
Another RMP or FCP	• Written confirmation that the business supplying the water: – has a current registered RMP or FCP; and – will notify the RMP operator if the water is found to be non-compliant to suitable water requirements.

[1] Examples of additional treatment are chlorination, filtration, boiling, ultraviolet radiation and reverse osmosis.

3.4.2.4 Water management for all types or sources of water

(1) The operator must ensure that the water reticulation system within the premises is designed, installed and operated in a manner that prevents:

a) cross connections between suitable water and water of a lower standard;
b) stagnant water (e.g. no dead ends and unused pipes); and

Draft for Consultation

c) black flow that may cause contamination of water supply [HC Spec 2.5.4 (2)].

(2) The operator must ensure that water pipes, storage tanks and other parts of the reticulation system are maintained in a condition that ensures the water is suitable for its intended purpose at point of use [HC Spec 2.5.4 (3)].

(3) A water management plan or procedure(s) must include:

a) any additional treatment:

i) as required by the operator supplying water or using water in a land-based premises or place; or
ii) in the case of an alternative water quality standard, as determined through analysis of hazards and other risk factors;

b) the water quality standard (including criteria) as determined through an analysis of hazards and other risk factors;
c) a water sampling and testing programme;
d) an action plan in the event of non-compliance with the water management plan; and
e) the requirements of the reticulation management procedures described in 3.4.2.1 (2) [HC Spec 2.5.4 (5)].

(4) If additional treatment is applied by the operator, the operator must include the following information in the RMP:

a) information about the traditional treatment (including type of treatment, operating parameters, procedures for control, monitoring or testing and acceptable limits);
b) a water sampling and testing regime for monitoring the effectiveness of the specific water treatment applied referred to in Schedule 1: Specification for Suitable Water Supplied by the Operator; and
c) corrective action procedures to be taken when the water source is found to be unsuitable, or has reason to believe it is unsuitable, based on the results of any test done, colour, odour, taste, etc. [HC Spec 2.5.4 (6)].

Guidance

Most stores are unlikely to apply additional treatment to water sourced from an independent supply.

Guidance on ways to keep roof water safe is provided in *Water Collection Tanks and Safe Household Water*, Ministry of Health, revised version date June 2018 (code 10148). Guidance on protecting bore and well water is provided in *Secure Ground Water (Bores and Wells) For Safe Household Water*, Ministry of Health, March 2000 (code 1129).

For more information on water safety and tank installation, read *Household Water Supplies*, Ministry of Health, revised version date September 2019 (code 4602).

If you are concerned about your water supply, contact a Health Protection Officer at your local public health service or an Environment Health Officer at your local council. They will be able to recommend a local water testing laboratory.

3.4.2.5 Water treatment

(1) The operator must ensure the water treatment system is installed and maintained in accordance with the manufacturer' instructions [HC Spec 2.2 (2)].

(2) The operator must document details of the water treatment in the water management plan including the following:

a) the type of water treatment;
b) parameters;

c) procedures for control, monitoring and testing;
d) acceptable limits;
e) a water sampling and testing programme for monitoring the effectiveness of the specific water treatment applied; and
f) corrective action procedures when the water source is found to be unsatisfactory based on the results of any tests done [HC Spec 2.5.4 (6)]

Guidance
Examples of additional treatment that may be applied by the operator for water from an independent supply are:
- chlorination;
- ultraviolet (UV) treatment;
- heating;
- coagulation;
- flocculation; and
- filtration.

Consult with a water treatment expert to determine the most appropriate treatment for the supply.

Discuss the types and frequency of the water testing, with the supplier of the particular treatment, necessary to:
- confirm the effectiveness of the treatment; and
- ensure that it does not adversely affect the quality of the water (e.g. clogging of filters).

3.4.2.6 Water analyses

(1) Water analyses use to demonstrate compliance with this Part and conducted on water supplied by an independent supplier or by the operator solely for the operator's use, must be performed by a recognised laboratory with the required tests in the laboratory's scope of accreditation to ISO/IEC 17025 [HC Spec 2.5.6 (1)].

(2) The operator must ensure that water samplers are trained appropriately to undertake water sampling [HC Spec 2.5.6 (2)].

(3) Clause 3.4.2.6 (1) does not apply to chlorine, pH or turbidity measurements, which may be performed by a suitability skilled person using documented test methodologies (including calibration procedures) and/or calibrated equipment [HC Spec 2.5.6 (3)].

(4) Water testing is undertaken for each water supply as appropriate to the outcome of the assessment, refer to Table 5: Water Testing for Suitable Water Supply.

Table 5: Water testing for suitable water supply

Assessment outcome	Water testing
Secure	Only initial testing. No ongoing testing is required.
Not secure	Ongoing water testing for the water criteria given in Table 1: Quality of Suitable Water in Schedule 1: Specification for Suitable Water Supplied by the Operator is done at a frequency specified in Table 2: Frequency of Ongoing Testing in Schedule 1: Specification for Suitable Water Supplied by the Operator.

Guidance

Refer to 6.4 Calibration for calibration procedures, etc.

An operator who uses an independent water supply that is not further treated on-site does not have to carry out water testing. They should consider using simple, low cost techniques such as monitoring free available

Draft for Consultation

chlorine levels and temperature to pick up any changes in water quality. Resources should be in place to take microbiological and chemical samples should these checks indicate a potential issue.

The operator should:

- take samples from a number of points in the reticulation system to ensure that the sampling is representative of the system as a whole;
- record the location of each sampling point so the source can be identified (e.g. identifying sampling points on the reticulation plan);
- ensure the sample bottle of chlorinated water supplies contain sodium thiosulphate to neutralise the residual chlorine in the water sample;
- ensure the samples are collected by trained personnel;
- have a documented procedure to ensure samples are taken, handled and transported so there is no significant change in the quantitative value of the determinants; and
- ensure that samples for microbiological analysis are analysed promptly.

If the laboratory cannot analyse samples within one hour of collection the operator should:

- immediately chill the samples to 10°C or cooler (but do not freeze) and deliver them to the laboratory within 6 hours of collection; or
- immediately chill the samples to 2 to 5°C and deliver them to the laboratory within 24 hours of collection.

3.4.2.7 Water reticulation management plan

(1) Flush the reticulation system (e.g. open taps at point of use to allow a significant flow of water to occur) when water is not used for an extended period, and after any repairs to the system. This ensures any stagnant water, rust, scale or other materials are flushed out of the system.

Guidance

Include in the documented reticulated management plan:

- an up-to-date plan or schematic of the reticulation system (e.g. using a site plan); and
- procedures for systematic checks:
  - on all water reticulation pipe work, equipment and storage facilities;
  - on integrity of all backflow prevention devices and valves connecting suitable and non-suitable water reticulations; and
  - for evidence of leaks.

Draft for Consultation

3.4.2.8 Non-complying water

When suitable water is found to be non-compliant, the actions in Table 6: Actions to be taken when Suitable Water is found to be Non-compliant should be taken.

Table 6: Actions to be taken when suitable water is found to be non-compliant

Scenario	Actions
The **local council or other independent supplier** advises that the water is not fit for drinking without additional treatment **Water supplied by the RMP operator** fails to comply with any of the requirements of the water management plan (including corrective actions) and there are no other means in the RMP to ensure the water meets the original standard at the point of use	The following actions are taken as appropriate to the scenario: **Immediate control and investigation of problem** • all operations requiring the use of suitable are stopped; • the cause of the problem is investigated; and • appropriate corrective actions are taken to rectify the problem (e.g. through further treatment). **Disposition or handling of affected products and equipment** • any affected product intended for human consumption is not used for that purpose unless assessment by a suitably skilled

For water supplied by another RMP or FCP, the other RMP or FCP operator advises the operator that the water does not meet the relevant suitable water standard Suitable water supply is **contaminated by non-suitable water** The RMP operator or Day-to-day Manager has **reason to believe that the water is not fit for use** and there are no procedures included in the RMP to ensure the water is suitable at the point of use	person indicates that an alternative action will render the product safe and suitable for human consumption; • any affected product intended for human consumption may be re-graded for animal consumption (e.g. petfood, stockfood, etc.) when the product meets the applicable requirements; • any affected food contact surfaces are cleaned and sanitised prior to reuse; and • any affected packaging materials and containers that cannot be effectively cleaned and sanitised, are not used for packaging of any product. Records of the assessment and corrective actions taken are kept.

3.4.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented water management procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

3.4.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for suitable water:

a) completed Water Supply Assessment Checklist (for operator supplied water);
b) water reticulation plan;
c) water management plan, if applicable;
d) plan or schematic of the reticulation system;
e) any water testing results; and
f) any water treatment applied.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.

Refer to the RMP Operator Resource Toolkit for example forms and procedures.

3.5 Equipment

3.5.1 Purpose and scope

(1) To ensure that all equipment is designed, constructed and maintained in a manner that minimises contamination of product.

Draft for Consultation

3.5.2 General requirements and procedures

(1) The operator must ensure equipment is:

a) durable and capable of withstanding repeated exposure to normal cleaning and sanitising:
b) resistant to chipping, cracking, flaking, delamination and abrasion;
c) able to withstand exposure to heat, water and all products expected to be processed under normal operating conditions; and
d) corrosion resistant [HC Spec 2.2 (1)].

(2) The operator must provide cleaning and sanitation facilities and equipment to ensure that personnel hygiene, hygienic condition of equipment, vehicles, conveyances and premises can be maintained [HC Spec 2.3 (3)].

(3) Ensure all surfaces in direct contact with any product are inert to the product, cleaning materials and other substances that it is likely to be exposed to under normal conditions of use.

(4) The operator must use only approved maintenance compounds during processing operations and in the maintenance of work areas, facilities and equipment [HC Spec 3.3 (1)].

Guidance

Refer to 6.5: Chemical Control for further guidance on approved maintenance compounds.

Contact surfaces

- stainless steel (300 series or better) is the preferred material for equipment that comes into contact with product;
- cast iron is not recommend for product contact surfaces because it is readily corroded and surfaces become roughened and pitted, which makes cleaning difficult;
- galvanised metal is not recommended because the zinc coating wears off to expose the base metal which corrodes. In addition, the zinc coating is soluble in acidic food, and in acid and alkali detergents. Where galvanised metal is present in equipment and is practical to do so, it may be coated with a food-grade protective coating;
- aluminium is not recommended. It has a tendency to warp, is susceptible to oxidation, and is also prone to corrosion;
- wood is not considered a suitable material for the construction of food machinery. Its porous nature allows products to penetrate the surface and once impregnated it cannot be cleaned effectively. Residual product provides a nutrient source for microorganisms;
- copper and its alloys, such as bronze, and brass, should not be used for direct product contact. Acidic foods may dissolve and erode copper sufficiently to pose a food hazard;
- new equipment for direct contact with products should be provided with a letter of guarantee from the supplier certifying its suitability for food use; and
- where appropriate, have internal corners or angles with a continuous smooth radius of at least 7 mm. A lesser radius may be used where necessary for proper functioning of parts or to facilitate drainage, provided that such areas can be readily cleaned.

3.5.2.1 Personnel hygiene equipment

(1) Ensure hand washing units are:

a) sufficient in number to allow for effective hygiene;
b) located in areas that are readily accessible to all persons working in or entering a storage or packing area;
c) located close to points of the process involving manual handling of product; and
d) provided with warm suitable water and approved soap.

Draft for Consultation

Guidance

Refer to 6.5: Chemical Control for further guidance on approved maintenance compounds for e.g. types of hand sanitisers.

(2) Additionally single use towels or other hand drying facilities that do not contaminate washed hands or the surrounding area should be provided adjacent to hand wash units.

(3) Provide for disposal of single use hand drying towels, where appropriate.

(4) Prohibit the use of roller towels and air dryers on the processing floor.

(5) Provide facilities for washing water proof clothing (e.g. boots, aprons, gloves, etc.).

(6) Ensure wash facilities are designed, constructed and located:

a) to suit the operator, the protective clothing that is worn and the equipment that is used; and
b) in a manner that minimises splashes onto surrounding areas, products and equipment.

Guidance

Sanitise taps and basins before use as part of your cleaning and sanitation programme. Refer to Part 5: Cleaning and Sanitation.

It is recommended to have non-hand operable (e.g. foot, knee, sensor, etc.) taps for hand washing.

The recommended temperature range for warm suitable water for hand washing is 38-44°C at the point of use.

Draft for Consultation

3.5.2.2 Monitoring equipment

(1) Ensure monitoring equipment have the capability, accuracy and precision appropriate for:

a) the product, process, facility or equipment it is fitted to; and
b) the measurement being taken.

(2) Monitoring equipment must be installed where it:

a) can be easily read;
b) is able to take accurate readings (e.g. warmest temperature of the refrigeration equipment or facility and the coldest temperature of the heating equipment); and
c) is adequately protected from physical and chemical damage [Definitions: Sanitary design].

(3) Calibrate measuring equipment that is used to carry out a critical measurement [HC Spec 6.2].

Guidance

Calibration requirements are described in 6.4: Calibration. Determine any critical measurements when developing your RMP.

3.5.2.3 Motors, drives and pumps

(1) Ensure motors, drives and pumps, including vacuum pumps, associated with processing equipment are:

a) appropriately designed and managed; and
b) suitably maintained so that food grade lubricants and smoke do not cause contamination of the food or process.

(2) Ensure lubricants meet the requirements of 6.5: Chemical Control.

3.5.2.4 Cleaning equipment - hoses

(1) Provide appropriate facilities for the storage of hoses, where fitted, to ensure hose ends are free from contact with the floor.

(2) Ensure hose materials are:

a) not a source of contamination to any product;
b) able to be adequately cleaned and maintained under the normal conditions of use; and
c) kept in good condition.

3.5.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

3.5.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for equipment:

a) supplier guarantees or certificates;
b) maintenance register; and
c) training records (if applicable).

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to Part 4: Repairs and Maintenance for requirements.

Refer to the RMP Operator Resource Toolkit for example forms and procedures.

Draft for Consultation

3.6 Amenities

3.6.1 Purpose and scope

(1) The following amenities must be provided for employees' use:

a) changing facilities and storing personal belongings;
b) personnel hygiene facilities; and
c) dining facilities [Definitions: Sanitary design].

(2) Amenities must be located so as not to jeopardise the hygienic processing and storage of products [Definitions: Sanitary design].

(3) Amenities must be designed, constructed and maintained in a manner that facilitates cleanliness and tidiness [HC Spec 2.2 (1)].

3.6.1.1 Lockers

(1) Construct any lockers provided for the storage of clothing and other personal belongings in the amenities so that:

a) there is adequate free space to allow for easy cleaning of lockers and their surrounding area; and
b) lockers should be set flush with walls or ceilings so that no material can be stored on top of the lockers.

(2) Provide dedicated facilities, where appropriate, for:

a) depositing dirty clothing;
b) storing clean clothing; and
c) laundering of dirty PPE on the premises or by contract arrangement.

3.6.2 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

3.6.3 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for amenities:

a) repairs and maintenance activities and systems;
b) site plan with the RMP boundary; and
c) internal audit reports.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.4: Operator Verification and Notifications for requirements.
Refer to Part 4: Repairs and Maintenance for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

Draft for Consultation

Part 4: Repairs and maintenance

4.1 Overview

(1) This Part Covers the aspects of:

a) 4.3: Programmed and Non-programmed Maintenance;
b) 4.4: Building Maintenance; and
c) 4.5: Equipment Maintenance.

4.2 General requirements and procedures

(1) Maintain roofs, gutters and drains to prevent build-up of debris that may lead to ponding, flooding, leaks and attract the harbourage of pests.

(2) The operator must ensure that premises, facilities, equipment and essential services are maintained in a manner that prevents the access of pests [HC Spec 2.2 (2)].

4.2.1 Maintenance of premises, equipment and essential services

(1) The operator must maintain the premises (including disused parts of premises), equipment and external environment within the physical boundaries, so that they do not become a source of contamination, air-borne contamination or pests, to the extent that the hygiene of any storage area is adversely affected [HC Spec 3.2 (1), AC Spec 3.14 (1)].

(2) The operator must develop and implement scheduled maintenance procedures, for routine maintenance at a time, frequency, and in a manner that will not affect product fitness for purpose, and associated things [HC Spec 3.2 (2), AC Spec 3.14 (2)].

(3) The operator must schedule routine maintenance, as appropriate, for:

a) essential services;
b) facilities;
c) storage areas; and
d) buildings and their external environment [HC Spec 3.2 (3), AC Spec 3.14 (3)].

(4) The operator must undertake any alterations, repairs and maintenance work in a timely manner (appropriate to the nature of the issue) that minimises exposure of product or associated things to hazards and other risk factors [HC Spec 3.2 (4), AC Spec 3.14 (4)].

(5) The operator must ensure that maintenance personnel comply with the requirements for personnel hygiene that are appropriate to the storage areas they are operating in [HC Spec 3.2 (5), AC Spec 3.14 (5)].

(6) The operator must ensure that product and associated things are not contaminated as a consequence of repairs and maintenance [HC Spec 3.2 (6), AC Spec 3.14 (6)].

(7) The operator must ensure that any maintenance issue that will have an immediate impact on product fitness for purpose:

a) is addressed immediately;
b) any affected product is assessed by a suitably skilled person to determine the appropriate disposition [HC Spec 3.2 (8), AC Spec 3.14 (8)].

Draft for Consultation

4.3 Programmed and non-programmed maintenance

4.3.1 Programmed maintenance

(1) The operator must inspect buildings, facilities and equipment routinely and systematically to identify and correct items that require preventative repair and maintenance [AP Reg 11 (1)].

(2) Ensure programmed maintenance is conducted at a time and in a manner that will not affect product's safety and suitability.

(3) Ensure programmed maintenance only occurs during processing if the impact on product safety and suitability is managed appropriately.

Guidance

Ensure maintenance occurs at the end of any re-packing period. If this is not practicable, it should take place at a time that reduces the opportunity of contaminating exposed packaging and products. This could be at a normal work break during re-packing.

A delay in completing programmed maintenance is acceptable in some situations (e.g. when parts are not available due to factors outside the operator's control) provided it does not affect product's safety and suitability.

(4) Ensure the frequency of programmed maintenance so that buildings, facilities and equipment remain suitable for producing safe and suitable products.

(5) Consider how frequently maintenance checks need to be conducted (e.g. daily, weekly, or less frequently, etc.). Repetitive problems or breakdowns may indicate that the maintenance frequency needs to be increased, or equipment or facilities need replacing.

(6) Consider and appropriately manage any risk to product safety and suitability that construction and renovation activities may cause.

Guidance

Consider the impact of construction and renovation activities on product safety during the planning phase of these activities. Implement appropriate measures to prevent product contamination.

Increase the amount of contamination monitoring in surrounding re-packing areas during construction or renovation. Re-packing should not occur in areas directly affected by construction and renovations.

Consider having lock out or tagging systems to protect against inadvertent operation and sign-off of any intrusive maintenance. Evidence of the completion of work (e.g. electrical certification, etc.) is advised.

4.3.2 Non-programmed maintenance (including emergency maintenance)

(1) Take all practical steps to ensure there is no adverse effect on product safety or suitability from non-programmed maintenance.

(2) Notify the supervisor immediately of any situation which requires non-programmed maintenance.

(3) Before any non-programmed maintenance work begins, ensure a suitably skilled person:

a) assesses the potential of the work and associated activities to contaminate:

i) products;
ii) packaging;
iii) equipment; and
iv) the working environment;

Draft for Consultation

b) puts in place appropriate controls to protect these items where possible and minimise contamination.

Guidance
When determining the urgency of non-programmed maintenance, the operator should consider the working environment conditions.

Repairing a minor issue should be scheduled as part of programmed maintenance and corrected within 6 months of being raised, or sooner where possible.

4.3.3 Breakages (glass and other physical hazards)

(1) Ensure in the event of a breakage during work or re-packing, the operator should:

a) isolate the affected area;
b) notify the supervisor in charge of the area of the incident;
c) ensure any affected PPE is changed;
d) use appropriate equipment to remove the breakage and clean the area;
e) identify and isolate any affected product and apply appropriate disposition, refer to 2.5: Corrective Action for requirements;
f) assess the hygienic status of the affected area and confirm as acceptable prior to resuming work or re-packing; and
g) document the issue and the corrective actions taken. Refer to 6.7: Non-complying Product and Recall for requirements.

4.3.4 Temporary repairs

(1) Ensure temporary repairs:

a) do not affect the hygienic status of equipment, work areas or the safety or suitability of products; and
b) are recorded on the maintenance system to be permanently repaired within an allocated time, as determined by the repair's impact on product safety and suitability.

Guidance

A temporary repair is acceptable to resolve an issue whilst allowing work to continue in the short-term, when permanent or complete repair cannot be made.

4.3.5 Approved maintenance compounds

(1) Using maintenance compounds within processing and support areas must be in accordance with manufacturer's directions and the conditions approved by MPI [HC Spec 3.3 (1)].

(2) Include compounds where there is potential for incidental product contact (e.g. sanitiser, lubricants, and surface treatment compounds, etc.). Refer to 6.5: Chemical Control for requirements.

4.3.6 External environment

(1) The operator must maintain external areas within the RMP boundary in a tidy condition to minimise potential sources of contamination and harbourages for pests [AP Reg 11].

Guidance

Ensure roadways and car parks are tar sealed or concreted.

Ensure landscaped areas (e.g. shrubs, trees, grass) are not in close proximity to buildings where product is processed.

Draft for Consultation

Cover and store unused equipment on hard standings away from buildings where product is processed or stored. Storage on grassed areas may increase the likelihood of pest harbourage due to the difficulties of maintain the grass height. Refer to 6.6: Pest Control for requirements.

4.3.7 Monitoring

(1) Refer to clause 4.5.3 for Monitoring.

4.3.8 Records

(1) Refer to clause 4.5.4 for Records.

4.4 Building maintenance

4.4.1 Purpose and scope

(1) To ensure buildings are maintained to prevent being a source of contamination.

4.4.2 General requirements and procedures

4.4.2.1 Services

(1) Maintain on-site services that affect the production of safe and suitable products. This includes water reticulation systems, waste water and sewage systems, and electricity supply (where appropriate).

(2) Service maintenance should be part of the programmed maintenance schedule.

4.4.2.2 Work areas, support areas and amenities

(1) The operator must maintain storage areas, support areas and amenities to:

a) allow for appropriate cleaning and sanitation to take place; and
b) to minimise product contamination [AP Reg 9 and 11].

Guidance

Examples of items that may affect product safety if poorly maintained include:

- exposed wood;
- openings to the outside environment such as windows, doors and vents; and
- fixtures and fittings (e.g. cracks and crevices in ceilings, walls, or floors, flaking paint, overhead leaks from pipes, equipment attachments, etc.).

4.4.2.3 Engineering and woodworking workshops, equipment and tools

(1) Prevent debris from engineering workshops (e.g. swarf, sawdust, other unwanted materials, etc.) from entering work, support or storage areas.

Guidance

This may be achieved by keeping doors closed, the use of swarf mats, boot washes, etc.

(2) The operator must ensure equipment, tools and parts used for repairs and maintenance in processing and support areas are not a source of contamination [AP Reg 11].

(3) Implement a 'tools and parts reconciliation system' to ensure all tools taken into processing, support or storage areas are accounted for once maintenance is complete.

Draft for Consultation

(4) Remove and return tools to a designated storage area (e.g. a shadow board, etc.) once maintenance or repair work is complete.

Guidance

Assess tools, tool kit and parts for their suitability for use in the intended environment. Where necessary clean and sanitise these before being taken into processing, support or storage areas.

A reconciliation system could include tool kit monitoring, shadow boards, counting and recording the number in and out, verification and sign-off once maintenance is complete (e.g. a work order).

4.4.3 Monitoring

(1) Refer to clause 4.5.3 for Monitoring.

4.4.4 Records

(1) Refer to clause 4.5.4 for Records.

4.5 Equipment maintenance

4.5.1 Purpose and scope

(1) To ensure equipment is maintained and not a source of contamination.

4.5.2 General requirements and procedures

(1) The operator must maintain equipment to ensure it is not a source of contamination to product [HC Spec 3.2 (1)].

(2) Determine the frequency of maintenance based on:

a) the type of equipment;
b) its intended use;
c) frequency of use; and
d) manufacturer's recommendations (where available).

(3) The operator must regularly update the maintenance schedule (as a controlled document) to ensure the maintenance requirements for new or re-commissioned equipment is included [RMP Spec 19 (2)].

Draft for Consultation

Guidance

Where manufacturer's recommendations are not available, maintenance frequencies should be based on the operator's knowledge of equipment performance, reliability and consistency.

Equipment maintenance checks should also include an assessment of:

- the equipment's overall condition and integrity (e.g. is it working properly);
- sources of physical contaminants (e.g. damaged, lost or worn parts, rust, loose flaking paint, loose parts on equipment prone to vibration, broken parts such as needles and blades, etc.); and
- microorganism harbourage sites (e.g. worn or frayed hoses, gaskets or belts, porous welds, product contact surfaces, etc.).

Repetitive equipment problems or breakdowns may indicate that the maintenance frequency should be reviewed and increased, or that the equipment needs to be replaced.

4.5.2.1 Damaged, decommissioned or idle equipment

(1) Store damaged, decommissioned or idle equipment in an appropriate way to ensure it does not become a source of contaminants or harbour pests.

(2) Ensure equipment that could be a source of contamination is:

a) physically isolated from processing lines and product; or
b) removed from work areas.

(3) Clearly identify damaged or decommissioned equipment that remains in work areas.

Guidance

Where possible, remove damaged or decommissioned equipment from storage areas or re-packing rooms. Decommissioned equipment may be stored outdoors, but should be placed on a hard standing (e.g. concrete, sealed or paved area) and covered.

The operator should document why equipment is decommissioned or damaged as these details can be helpful when determining the equipment's suitability for repair or re-commissioning.

4.5.2.2 Returning equipment to use (including re-commissioning equipment)

(1) Document a procedure to ensure that equipment returned to use (e.g. after repairs and maintenance, re-commissioning or having previously been idle, etc.) is not a source of contamination to the product.

(2) Ensure the procedure includes steps to:

a) thoroughly clean and sanitise equipment before being returned to a processing or support area;
b) re-validate previously validated equipment if the repairs and maintenance activity may affect its validation status; and
c) perform a pre-operational check before processing re-commences.

4.5.2.3 Maintenance personnel and contractors

(1) Ensure that maintenance personnel, including contractors are:

a) competent to perform the required tasks;
b) trained to do their job without contaminating product (or if contamination occurs, able to follow appropriate product disposition procedures);
c) where possible, able to minimise contamination of the surrounding environment; and
d) trained in and adhere to hygienic requirements.

Guidance

Examples of minimising contamination of surrounding environment include:
- adequate clean-up upon completion of the work; and
- the use of dedicated tools or at least a sanitation step to minimise cross-contamination.

Refer to 2.2: Personnel Health and Hygiene and 6.7: Non-complying Product and Recall for more information.

Ensuring contractors are trained can be achieved in several ways, including:
- providing contractor inductions or refresher training;
- use of approved supplier databases; and
- having identification and supervision (where appropriate) whilst on site.

Draft for Consultation

4.5.3 Monitoring

(1) The operator must carry out regular checks for compliance with document procedures [APA Section 17].

Guidance

The frequency and type of monitoring will depend on the nature of the operation, and the degree of risk if hazards are uncontrolled. Monitoring options to identify repairs and maintenance problems include:

- specific checks on equipment at defined intervals;
- daily checks on work areas;
- weekly checks on product support areas (e.g. chemical stores, packaging stores, dry stores, etc.); and
- monthly checks on the entire premises and surrounding areas.

Monitoring should identify and record all issues or non-compliances that need to be addressed, and specific checks should be carried out to ensure that the issues have been dealt with and recorded.

The operator should check, at least annually, that the documented procedures are appropriate.

4.5.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for repairs and maintenance:

a) repairs and maintenance activities and systems (e.g. a maintenance schedule);
b) assessment and evidence of personnel competencies;
c) site plan with the RMP boundary;
d) maintenance records or job sheets including:
    i) when and how the defect breakdown was repaired;
    ii) who conducted the work;
    iii) who has signed-off that it was completed;
    iv) any findings or issues; and
    v) that appropriate equipment "return to use" procedures were followed;
e) any equipment specifications and manufacturer's instructions;
f) any building reports;
g) incident reports, records of assessment and disposition of non-complying product (if applicable);
h) corrective action records (including details of affected product if applicable);
i) verification records;
j) refrigeration validation reports; and
k) internal audit reports.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Comprehensive maintenance records will assist the operator to verify that the repairs and maintenance programme is working correctly. It may also be useful in the event of a food safety incident, trace back or recall situation and may help to reduce the risk to the business.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.2: Personnel Health and Hygiene for requirements.
Refer to 2.3: Personnel Competencies and Training for requirements.

Draft for Consultation

Refer to 2.4: Operator Verification and Notifications for requirements.
Refer to 2.5: Corrective Action for requirements.
Refer to Part 3: Design, Construction and Maintenance of Buildings, Facilities and Equipment for requirements.
Refer to Part 4: Repairs and Maintenance for requirements.
Refer to 6.7: Non-complying Product and Recall for requirements.

Refer to the RMP Operator Resource Toolkit for example forms and procedures.

Draft for Consultation

Part 5: Cleaning and sanitation

5.1 Purpose and scope

(1) To ensure the effective cleaning and sanitation of the premises, facilities and equipment to prevent or minimise the contamination of products.

5.2 General requirements and procedures

(1) The operator must maintain all areas of their site (within the physical boundaries that the RMP applies to), including the facilities, support areas and equipment, in a clean and sanitary condition appropriate to the use of the area [HC Spec 3.4 (1), AC Spec 3.18 (1)].

(2) The operator must develop and implement cleaning and sanitation procedures, that are appropriate, for all areas including:

a) the suitably skilled person(s) responsible for implementation of the procedures;
b) the monitoring and verification of the procedures; and
c) corrective action procedures that are to be applied in the event of loss of control [HC Spec 3.4 (2), AC Spec 3.18 (2)].

(3) The operator must use only approved maintenance compounds for cleaning and sanitation that approved for that purpose before use [HC Spec 3.4 (3), AC Spec 3.18 (3)]. Refer to 6.5: Chemical Control for requirements.

(4) The operator must develop and implement a written cleaning programme for all the following:

a) storage areas;
b) freezers, chillers, hot rooms, or cool rooms (if relevant);
c) equipment;
d) amenities; and
e) external areas of the premises [AP Reg 11].

(5) Ensure the cleaning and sanitation programme includes the following information:

a) areas and equipment to be cleaned;
b) procedures for all cleaning and sanitising operations, including the cleaning method, frequency of cleaning and sequence of cleaning;
c) detergents or sanitisers to be used, their concentration, application method and contact time required;
d) the identity or position of person(s) responsible for the cleaning activity;
e) methods of frequencies of monitoring and verification of the effectiveness of the cleaning and sanitation procedures; and
f) cleaning records forms or check sheets.

Guidance

Refer to 2.4: Operator Verification and Notifications for requirements.

Clean re-packing and storage areas, facilities and equipment in accordance to the cleaning programme. Frequency should be often enough to minimise or prevent cross-contamination of product.

Regularly clean and sanitise other items that may contaminate products indirectly (e.g. handles of doors and refrigerators, taps, hand basins, etc.).

Draft for Consultation

The effectiveness of cleaning and sanitation can be verified by direct or indirect microbiological testing (e.g. using swabs) of the relevant environment and product contact surfaces.

The operator may choose to incorporate existing documented information into their cleaning and sanitation programme by reference.

5.2.1 Cleaning methods

(1) The operator must carry out cleaning activities in a way that will minimise contamination of:

a) products;
b) packaging material;
c) previously cleaned areas; and
d) facilities or equipment [AP Reg 11].

(2) Train staff adequately on the handling of maintenance compounds and the implementation of the cleaning programme.

(3) Use cleaning compounds in accordance with procedures given in 6.5: Chemical Control.

(4) Ensure the cleaning method is appropriate to:

a) the product and the operation;
b) the type of surface to be cleaned; and
c) the type of characteristics of the residual material or dirt to be cleaned off the surface.

Guidance

Care is required to avoid re-contamination. Cleaning from clean areas towards dirty areas can help minimise the spread of contamination (e.g. walls should be washed before floors). However, when hosing floors, high-pressure hoses can re-contaminate previously cleaned surfaces with waste water.

Most work areas will require a wet cleaning routine. Cleaning using a mixture of wet and dry methods may be suitable in some circumstances (e.g. support areas, packing areas that require occasional wet cleaning, etc.).

Personnel performing cleaning duties should inspect their own work and report to their supervisor if the methods or chemicals used do not produce the expected results.

Validation

When validating the effectiveness of a cleaning and sanitising programme, it may be possible to obtain information from chemical suppliers about the bactericidal properties of approved maintenance compounds. Provided they are used in accordance with the recommendations, this information could be used to support other evidence, such as visual or other sensory assessments and testing.

Many microbiological techniques are also available to validate cleaning and sanitising programmes, including swabs and contact slides. Swabs should be taken after the last step in the cleaning process and sites should be sampled under essentially the same conditions each time (e.g. same day, time, etc.) so that comparisons can be made over time. To validate a programme, sample every day for at least a week to allow for normal variation. Re-validation may be necessary if changes are made or new equipment is introduced.

5.2.2 Wet cleaning

(1) Wet cleaning (e.g. water and steam, etc.) should be contained within the immediate area that is being wet cleaned to prevent wetting dry packaging, products, and dry product areas.

(2) If product is not removed from wet cleaning areas, the amount of water used should be limited to that necessary to complete the cleaning procedure and not be a source of contamination.

Draft for Consultation

(3) All equipment and product contact surfaces that are wet cleaned should be free from residues and moisture before processing restarts.

Guidance

A basic wet cleaning and sanitising procedure usually involves:

- removal of gross contamination;
- rising of the area with cold or warm water (60°C) or cooler to prevent coagulation of protein;
- applying a detergent solution or foam and leaving it on all surfaces for the time specified by the manufacturer;
- scrubbing surfaces to loosen and remove dirt;
- rising with water and draining;
- if scale has been removed, an acid detergent is used at this stage, followed by rinsing and draining;
- applying a chemical sanitiser and leaving it on all surfaces for the time specified by the manufacturer;
- rinsing off the chemical sanitiser with water and draining; and
- allowing surfaces and equipment to dry.

5.2.3 Cleaning inspection

(1) Cleaning checks or inspections should be undertaken on a regular basis, as indicated in the cleaning and sanitation programme to:

a) ensure compliance with the cleaning and sanitation programme; and
b) check the effectiveness of cleaning by assigned personnel.

5.2.4 Equipment used for cleaning

(1) Cleaning implements and equipment should be maintained in a hygienic condition and should not introduce any hazard or foreign object to any product or packaging.

(2) Ensure cleaning equipment is:

a) used for cleaning purposes only;
b) stored in a hygienic manner when not in use; and
c) maintained in a good state of repair.

Draft for Consultation

Guidance

Where possible, single use cleaning equipment is recommended. Multiple-use cleaning equipment (e.g. re-useable cloths, brushes, squeegees, etc.) should be cleaned and sanitised daily or at a frequency to minimise cross-contamination between cleaning activities.

Ensure equipment removed from a dry work area for purposes of wet cleaning, is dry prior to its return.

5.2.5 Cleaning of storage areas

(1) Refrigeration units, including fans and evaporators, should be cleaned and sanitised periodically.

(2) Stack and store packed products, packaging and other materials in a tidy manner. Adequate space should be available to allow effective cleaning in the storage area.

(3) Clean up spills immediately.

(4) Remove and dispose of damaged packaged products, and other materials as soon as possible. Refer to 6.7: Non-complying Product and Recall for requirements.

Keep dry stores dry and clean regularly by sweeping or vacuuming.

Guidance

Packaged products, packaging and other materials should be stored off the floor (e.g. use clean pallets, etc.). Refer to 6.2: Storage for further details.

5.2.6 Dry cleaning

(1) Dry cleaning is recommended for areas where dry materials are handled and stored including:

a) product and packaging stores;
b) preparation areas for re-packing non-exposed products; and
c) outer packaging areas.

(2) Dry cleaning methods include brushing, scraping and vacuuming.

(3) Dry cleaning in areas with exposed products, is only appropriate where moisture level in products are below levels sufficient to support microbial growth.

5.2.7 Cleaning of amenities

(1) Regularly clean amenities and maintain a hygienic condition.

5.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

(2) The frequency of monitoring should be sufficient to give confidence that the cleaning and sanitising programme is operating effectively.

(3) Repetitive failures of the cleaning and sanitation programme must be investigated and corrected to ensure that the programme is effective [AP Reg 11].

5.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for cleaning and sanitation:

a) a register of approved maintenance compounds;
b) cleaning records;
c) validation records; and
d) verification of cleaning records (e.g. reality checks, chemical strength tests, microbiological tests, etc.).

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.4: Operator Verification and Notifications for requirements.
Refer to 6.5: Chemical Control for requirements.

Refer to the RMP Operator Resource Toolkit for example forms and procedures.

Draft for Consultation

Part 6: Supporting systems

6.1 Receipt of incoming materials

6.1.1 Purpose and scope

(1) To ensure that all incoming materials (including products and packaging) are handled and stored according to requirements.

6.1.2 General requirements and procedures

(1) The operator must store and handle all materials so as to minimise any potential contamination or deterioration [HC Spec 22.2 (1)].

(2) All incoming materials must be checked for the presence of any visible contaminants, damage, and other relevant characteristics (e.g. temperature, etc.) appropriate to the nature of the product and any agreed specifications [RMP Spec 11].

(3) Check materials on arrival (reception or inwards goods) or prior to use to ensure they are clearly labelled and are fit for purpose.

(4) All documentation accompanying incoming products, including information necessary for the effective identification, traceability and inventory control of products, should be checked for completeness and accuracy.

(5) All consignments must have a unique identification and/or label to enable traceability to be maintained [HC Spec 28.2 (1)].

(6) All consignments must be entered in the inventory control system [HC Spec 28.2 (1)].

Draft for Consultation

6.1.2.1 Transfer and conveyance of products

(1) Incoming refrigerated products must be transferred without unnecessary delay to appropriate chiller, freezer or cold store to ensure that required product temperatures are maintained [HC Spec 18.16 (1)].

(2) Products should be transferred or conveyed in a manner that minimises any contamination or damage (e.g. forklift damage, etc.) to products.

(3) Products with damaged packaging should be handled in manner that will minimise:

a) the exposure or spillage of the product (e.g. products can be wrapped and sealed);
b) contamination or deterioration of the product; and
c) contamination of other products and the storage environment.

6.1.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

Monitoring options include:

- checks of all materials on arrival;
- weekly checks to confirm that materials are clearly identified, stored correctly and traceability is maintained.

The operator should check, at least annually, that documented procedures are appropriate.

6.1.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for receipt of incoming materials:

a) incoming material delivery documentation (e.g. consignment notes, etc.); and
b) any daily or weekly check sheets.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence, etc.) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.

Refer to the RMP Operator Resource Toolkit for example forms and procedures.

6.2 Storage

6.2.1 Purpose and scope

(1) To ensure that all products are refrigerated where required and stored under appropriate conditions so that they remain fit for intended purpose.

6.2.2 General requirements and procedures

(1) The operator must ensure that products in their charge are stored in a manner that minimises:

a) the risks of contamination, spoilage or deterioration;
b) the proliferation of pathogenic microorganisms; and
c) the development of toxins [AP Reg 9, Dairy Processing Spec 36 (1)].

(2) The operator must ensure that any chilling and freezing is conducted without unnecessary delay and in a manner that minimises any potential microbial proliferation and contamination of product [HC Spec 18.16 (1), AC Spec 8.8 (1)].

Guidance

Product labels are usually applied by the manufacturer or supplier of the product. However, store operators may be asked by the supplier to apply certain labels on certain products (e.g. transportation outers, etc.). The operator must comply with the relevant regulatory requirements mentioned above considering the type of product, packaging and label. Refer to 6.3.2.3.1: Labelling of Transportation Outers.

(3) The operator should store materials:

a) away from inappropriate or potentially harmful chemicals;
b) in an area that is clean, tidy and free from pests;
c) at the appropriate temperature as per the manufacturers' or supplier's direction (e.g. ambient, chilled, frozen, etc.);
d) as per the label directions provided by the manufacturer or supplier;
e) off the floor in closed containers or packs when not in use (e.g. on clean pallets, etc.); and
f) with clear instructions.

(4) All containers of inputs must be clearly identified or labelled so that inventory control and traceability can be maintained [AP Reg 18 and 19].

Draft for Consultation

(5) The operator must ensure that if any packaging is damaged, potentially affecting the fitness for intended purpose of product, the product must be:

a) handled in a manner that minimises contamination and the damage to the packaging rectified; or
b) appropriately disposed of [HC Spec 7.2 (3)]. Refer to 6.7: Non-complying Product and Recall for requirements.

(6) Storage areas must be kept clean and tidy [AP Reg 11].

(7) Clean up spills immediately. Refer to Part 5: Cleaning and Sanitation for requirements.

(8) The operator must establish and carry out effective procedures to:

a) ensure appropriate and adequate maintenance, cleaning and sanitation;
b) manage waste; and
c) control pests [AP Reg 11 (1)].

Guidance
Refer to Part 4: Repairs and Maintenance, Part 5: Cleaning and Sanitation, 6.8: Waste Management and 6.6: Pest Control respectively for requirements.

(9) The operator must ensure that maintenance compounds are stored, handled and used in a manner that minimises contamination [AP Reg 11 (3)]. Refer to 6.5: Chemical Control for requirements.

(10) The operator must ensure that any product (other than live fish or BMS) that is preserved primarily by refrigeration is reduced to the maximum chilled or frozen temperatures, validated at the thermal centre of the product, as specified in Table 7: Allowable Temperatures for Release from Primary Processing Operations, prior to release from any primary processing premises [HC Spec 18.16 (2)].
Table 7: Allowable temperatures for release from primary processing operations

Product type	Chilling or freezing temperature
Chilled mammals, ostriches, emus and poultry	7°C
Frozen mammals, ostriches, emus and poultry	-12°C
Shucked pāua intended for canning in New Zealand	6°C
Chilled whole fish	-1 to 1°C
Chilled fish product	-1°C to 4°C
Frozen fish or fish product (including shellfish)	-18°C
Brine-frozen fish	-9°C

Guidance

Chillers may also be used for tempering product and for short term storage during processing. In such cases, there is no requirement to hold the product at 1°C.

(11) Clause 6.2.2 (11) does not apply if the further processing or transportation of the product is documented in an RMP or a registered Food Control Plan (FCP) under the Food Act 2014, so that the relevant risk factors are managed [HC Spec 18.16 (3)].

(12) If the documentation as described as clause 6.2.2 (12) forms part of another RMP or FCP, the consigning operator must ensure that:

a) the operator of the receiving programme is identified in the consigning operator's RMP;
b) there is no gap in the process documentation as the product is transferred between programmes or plans; and

Draft for Consultation

c) all relevant programmes or plans are registered prior to the commencement of the operation [HC Spec 18.16 (4)].

(13) In the case of chilled product (e.g. beef, lamb, etc.), clause 6.2.2 (11) does not apply if the requirements of Schedule 4: Specifications for the Transfer of Product that has not Reached its Preservation Temperature for Red Meat in the Animal Products Notice: Specifications for Products Intended for Human Consumption are complied with and the product is:

a) received by a premises registered under the Food Act 2014;
b) transferred between 2 premises with RMPs, provided those programmes contain the requirements for the transfer of chilled products within their scope; or
c) transferred between a premises with an RMP and a premises with a registered FCP, provided those programmes or plans contain the requirements for the transfer of chilled products within their scope [HC Spec 18.16 (5)].

(14) For frozen fish or fish product (including shellfish), a brief temperature fluctuation up to a maximum temperature of -15°C during transportation is permitted. The temperature must be reduced to a temperature of -18°C or colder without unnecessary delay [HC Spec 18.16 (6)].

(15) For brine frozen fish, a brief temperature fluctuation up to a maximum temperature of -7°C during transportation is permitted. The temperature must be reduced to a temperature of -9°C or colder without unnecessary delay [HC Spec 18.16 (7)].

(16) Shucked pāua must not be held at greater than 1°C for more than 3 days [HC Spec 18.16 (8)].

(17) The operator must ensure that if pre-programmed process control parameters are used to operate and control a process that is critical to product safety, unauthorised access to the programmed parameters is prevented [HC Spec 22.3].

(18) Storage areas used to store or contain products that are not suitable for processing or not fit for human consumption but are suitable or fit for some other purpose must:

a) be kept under controlled conditions so it is clearly identified in a manner that will ensure that it will not be mistakenly or fraudulently released; and
b) not be sources of contamination to other product that is intended for human consumption [HC Spec 25.4 (1) and (2)].

(19) Identify products and materials at all times.

(20) The operator must store products and associated things to:

a) minimise deterioration of products;
b) minimise damage to packaging;
c) facilitate effective cleaning; and
d) facilitate effective traceability and inventory control [HC Spec 25.2 (1), AC Spec 3.15 (1)].

Guidance

The use of racking systems in stores has been found to be advantageous to avoid stack damage to packaging, and for the maintenance of the integrity of the product.

(21) Products that may taint or contaminate other products should be kept separately, or be prevented, by other effective means, from contaminating products.

(22) Discard any stored product when:

a) it is no longer safe (e.g. contaminated with rodent droppings, chemicals) or suitable for use (e.g. it has signs of spoilage, it is past its use-by-date); or
b) important information needed for its safe use is lost (e.g. identity). Refer to 6.7: Non-complying Product and Recall for requirements.

Draft for Consultation

Guidance

Products not intended for export should be identified so that they cannot be mistaken for export eligible product.

6.2.2.1 Refrigerated or ambient storage

(1) The required temperature of the product must be maintained during refrigerated storage [HC Spec 25.3 (2), AC Spec 3.15 (4)].

(2) Equipment for the control and monitoring of temperatures and other parameters (e.g. air-flow) must be operating at all times while refrigeration facilities are in use [DPC 4 11].

Guidance

Continuous monitoring of refrigerated temperatures and other relevant parameters is recommended. If this is not possible, temperatures (and other relevant parameters) should be monitored periodically and at a frequency based on performance.

If exporting, the operator should check the relevant OMARs to see whether continuous automatic temperature recording devices (CATRs) are needed.

6.2.2.1.1 Tempering or thawing

(1) The operator should apply appropriate temperature control during the tempering or thawing process to minimise the growth of pathogenic and spoilage microorganisms in the product.

(2) The operator should have documented procedures and time/temperature parameters for the tempering or thawing of product.

(3) Trials should be conducted before setting tempering or thawing guidelines.

(4) Cartons or pallets should be labelled when the product was removed from the freezer and when it is due for dispatch.

(5) Products should be controlled so the time and temperature period is not exceeded.

Draft for Consultation

6.2.2.1.2 Controlled atmosphere storage

Guidance

Controlled atmosphere storage generally refers to decreased oxygen and increased carbon dioxide concentrations, by a precise control of gas composition.

Gas composition (e.g. oxygen (O_2), carbon dioxide (CO_2) and nitrogen), temperature and humidity of a storage room can be controlled in order to extend product shelf life, control pests (e.g. dry commodities such as grains and legumes) or control the ripening process (e.g. horticultural produce). Fruits and vegetables naturally produce carbon dioxide (even after harvesting), therefore, in order to delay the ripening process, and maintain flavour and quality, this release will need to be controlled.

Each product has optimum storage conditions, these need to be controlled to best extend the shelf life during storage.

(1) Ensure the temperature, humidity and gas concentration are continuously controlled during the products' storage.

(2) Ensure there is adequate air circulation between products, packaging and associated things.

(3) Ensure products (such as fruits and vegetables) are separated, each with their own ventilation system to ensure that ethylene gas (e.g. produced by bananas and apples, etc.) do not cause vegetables to

sprout (e.g. potatoes, etc.), and to prevent odours transferring between products (e.g. from cabbage or turnips, etc. to apples and pears, etc.).

(4) Ensure a high humidity is maintained to prevent products from shrivelling.

(5) Regularly examine products for any signs of deterioration (e.g. signs of shrivelling, softness, mould, mustiness, etc.). Refer to 6.7: Non-complying Product and Recall for requirements.

(6) Immediately remove products with signs of deterioration, as spoilage will quickly spread to other products. Refer to 6.8: Waste Management for requirements.

(7) The temperature range, O_2 and CO_2 requirements to maintain a controlled atmosphere for the storage of fruits and vegetables are outlined in Guidance Table 8: Controlled Atmosphere Requirements for Fruits and Guidance Table 9: Controlled Atmosphere Requirements for Vegetables.

Guidance Table 8: Controlled atmosphere requirements for fruits

Commodity	Temperature Range (°C) [1]	Controlled Atmosphere [2]	
		O_2 (%) [3]	CO_2 (%) [4]
Apples			
Braeburn	0.7	1.8	1.0
Fuji	0.3	1.4	1.0
Gala	1.3	1.7	1.6
Granny smith	0.6	1.4	2.0
Royal gala	1.7	1.8	-0.2
Apricot	0 to 5	2 to 3	2 to 3
Asian pear	0 to 5	2 to 4	0 to 1
Avocado	5 to 13	2 to 5	3 to 10
Banana	12 to 16	2 to 5	2 to 5
Blackberry	0 to 5	5 to 10	15 to 20
Blueberry	0 to 5	2 to 5	12 to 20
Cherry, sweet	0 to 5	3 to 10	10 to 15
Cranberry	2 to 5	1 to 2	0 to 5
Fig	0 to 5	5 to 10	15 to 20
Grape	0 to 5	2 to 5	1 to 3
Grapefruit	10 to 15	3 to 10	5 to 10
Kiwifruit	0 to 5	1 to 2	3 to 5
Lemon	10 to 15	5 to 10	0 to 10
Lime	10 to 15	5 to 10	0 to 10
Mango	10 to 15	3 to 7	5 to 8
Nectarine	0 to 5	1 to 2	3 to 5
Olive	5 to 10	2 to 3	0 to 1
Orange	5 to 10	5 to 10	0 to 5
Papaya	10 to 15	2 to 5	5 to 8
Peach, clingstone	0 to 5	1 to 2	3 to 5
Peach, freestone	0 to 5	1 to 2	3 to 5
Pear			
Bosc	-	1 to 2.5	0.5 to 1.5
Persimmon	0 to 5	3 to 5	5 to 8
Pineapple	8 to 13	2 to 5	5 to 10
Plum	0 to 5	1 to 2	0 to 5
Pomegranate	5 to 10	3 to 5	10 to 15
Raspberry	0 to 5	5 to 10	15 to 20
Strawberry	0 to 5	5 to 10	15 to 20

Draft for Consultation

[1] Usual and/or recommended range, a relative humidity of 90 to 95% is recommended.
[2] Specific gas combinations depend on cultivar, temperature and duration of storage. These recommendations are for transport and/or storage beyond 2 weeks. Exposure to lower O_2 and/or CO_2 concentrations for shorter durations may be used for control of some physiological disorders, pathogens and/or insects.
[3] O_2 refers to oxygen gas.
[4] CO_2 refers to carbon dioxide gas.

Guidance Table 9: Controlled atmosphere requirements for vegetables

Vegetable	Temperature (°C) [1]		Atmosphere [2]	
	Optimum	Range	O_2 (%) [3]	CO_2 (%) [4]
Artichokes	0	0 to 5	2 to 3	2 to 3
Asparagus	2	1 to 5	Air	10 to 14
Beans, green snap	8	5 to 10	1 to 3	3 to 7
Broccoli	0	0 to 5	1 to 2	5 to 10
Brussel sprouts	0	0 to 5	1 to 2	5 to 7
Cabbage	0	0 to 5	2 to 3	3 to 6
Cauliflower	0	0 to 5	2 to 3	3 to 4
Celery	0	0 to 5	1 to 4	3 to 5
Cucumbers, fresh	12	8 to 12	1 to 4	0
Herbs [5]	1	0 to 5	5 to 10	4 to 6
Leeks	0	0 to 5	1 to 2	2 to 5
Lettuce, crisphead	0	0 to 5	1 to 3	0
Lettuce, leaf	0	0 to 5	1 to 3	0
Mushrooms	0	0 to 5	3 to 21	5 to 15
Onions	0	0 to 5	1 to 2	0 to 10
Parsley	0	0 to 5	8 to 10	8 to 10
Pepper, bell	8	5 to 12	2 to 5	2 to 5
Pepper, chili	8	5 to 12	3 to 5	0 to 5
Spinach	0	0 to 5	7 to 10	5 to 10
Spring onions	0	0 to 5	2 to 3	0 to 5
Sweet corn	0	0 to 5	2 to 4	5 to 10
Tomatoes, green	12	12 to 20	3 to 5	2 to 3
Tomatoes, ripe	10	10 to 15	3 to 5	3 to 5

[1] Optimum and range of usual and/or recommended temperatures, a relative humidity of 90 to 95% is usually recommended (except for spring onions).
[2] Specific gas combinations depend on cultivar, temperature and duration of storage.
[3] O_2 refers to oxygen gas.
[4] CO_2 refers to carbon dioxide gas.
[5] Herbs includes chervil, chives, coriander, dill, sorrel and watercress.

Draft for Consultation

Food and Agriculture Organisation of the United Nations, FAO. (n.d.). Chapter 7: Storage of Horticulture Crops – 4. Accessed from: http://www.fao.org/3/ae075e/ae075e19.htm

6.2.2.1.2 Industrial use

Guidance

This section refers to the storage of industrial use (e.g. non-food animal products not for human and/or animal consumption such as pharmaceuticals (i.e. blood, vaccines, etc.), hides and skins, bees wax, wool or fibre, trophies, tallows, etc.).

Pharmaceutical products require controlled storage to prevent the loss of product strength. Environmental control (e.g. temperature, light and humidity, etc.) should be controlled to ensure products remain stable

and maintain products fitness for intended purpose. High temperature and relative humidity are the most important factors involved in pharmaceutical degradation.

(1) Ensure pharmaceuticals are stored (e.g. cool conditions, refrigeration, etc.) as per the manufacturers' or suppliers' directions.

(2) Ensure pharmaceuticals have adequate security to prevent product tampering.

(3) Ensure tanned hides are stored out of direct sunlight.

(4) Ensure oily hides are stored away from non-oily hides with an impenetrable barrier in between to prevent oil stains.

(5) Ensure coloured hides, skins or leather is stored away from non-coloured products with an impenetrable barrier, to prevent bleeding and colour transfers.

(6) Ensure tanned hides:

a) do not contact metal, as the tanning agents often react with most metals, especially ferrous metals (e.g. iron, steel, brass, nickel, silver, copper, bronze, etc.); and
b) are separated from rawhides.

(7) Ensure tallows and trophies are stored in a dry area, at ambient temperature.

(8) Ensure trophies have been preserved correctly by a suitably skilled person (e.g. a taxidermist, etc.).

Guidance

Hides and skins
Sunlight will dry out tanned hides and will cause fading. Maintain the humidity surrounding hides at 45 to 55%, and a temperature of 65 to 70°C, but no more than 75°C.

If hides are re-packed on-site, ensure the leather is not folded. Always roll hides to prevent creases and preserve the smooth appearance.

If the humidity is too low when storing hides, the leather becomes brittle and hardens over time. However, if the humidity is too high, or there is insufficient air circulation, mould can form on the leather.

Beeswax
The properties of beeswax change with the storage temperature, it becomes brittle below 18°C, is solid at ambient temperature, is soft and pliable around 35 to 40°C, and melts at 64.5°C.

Wool and fibre
The ideal storage conditions for wool and fibre is:
- a dry room with a temperature of 20°C;
- absence of direct sunlight; and
- humidity control between 30 to 50%.

Draft for Consultation

6.2.2.2 Chilled or freezing

Guidance

This section only covers the further chilling (e.g. chilling of meat from 7°C to 4°C) or freezing of products that have already been chilled or frozen by the supplier and are received at the store in a refrigerated state.

It does not cover the cooling or chilling of products to the required preservation temperature (e.g. cooling of meat and meat products, and poultry from slaughter temperature to 7°C; cooling of heat-treated dairy products to refrigerated temperature).

(1) Any chilling of product must be conducted without unnecessary delay and in a manner that minimises contamination and deterioration [HC Spec 25.3 (1)(a), AC Spec 3.15 (3)(a)].

(2) The operator must monitor and keep records demonstrating the maintenance of the preservation temperature during storage [HC Spec 25.3 (2)].

(3) The chiller or freezer must be operated within the capacity that it has been validated for [HC Spec 2.3 (2)].

(4) Refrigeration facilities should be designed and constructed to ensure that condensation drip on to products or equipment is minimised.

(5) The required temperature must be achieved as quickly as necessary to maintain the fitness for intended purpose of the product [HC Spec 18.16 (1)].

Guidance

The required preservation temperatures for non-dairy animal products for human consumption (e.g. meat, poultry, seafood, etc.) are specified in the Animal Products Notice: Specifications for Products Intended for Human Consumption 2020.

There are no regulatory requirements for preservation temperatures for dairy products. The required temperatures are likely to be set by the manufacturer or supplier, and will vary depending on the type of dairy material or dairy product.

There are also no specified preservation temperatures for non-dairy animal products for animal consumption. It is common practice to use the specified preservation temperatures for animal products for human consumption as the default temperatures.

Draft for Consultation

6.2.2.3 Blast freezing

(1) Ensure refrigerated product is processed (i.e. blast frozen) to the required preservation temperature for frozen storage.

(2) Ensure blast freezing of any product is conducted without unnecessary delay and in a manner that minimises contamination and deterioration.

6.2.2.4 Packing or re-packing

Guidance

Packing or re-packing means making or breaking up small consignments and placing into cartons for individual customer consignments but does not include packing or re-packing of products into other contact packaging.

This section also covers picking orders (e.g. an individual order at the request of the customer, etc.).

(1) Products are packed or re-packed (product not exposed to the environment), stored, and dispatched with minimal risk to the product by:

a) having a designated area where the 're-packing' process is undertaken;
b) the area being clean (refer to 5.2.6: Dry Cleaning for Cleaning a Storage Area);
c) personnel being suitably attired;
d) product designed for 're-packing' being managed via the inventory system; and
e) all re-packaged product being appropriately labelled (refer to 6.3: Traceability, Inventory and Labelling).

(2) Any 're-packed' product found to be packaged incorrectly will be:

a) segregated from other products; and

b) identified as non-conforming or non-complying product (e.g. by labelling, status changed in the inventory system).

(3) In case of incorrect labelling of 're-packed' products, appropriate corrective actions will be taken.

6.2.2.4.1 Re-packing shellfish

(1) The operator must ensure shellfish for re-packing originate only from a premises with an RMP [HC Spec 23.22 (1)]002E

(2) The operator must ensure that if re-packing of shellfish occurs:

a) where the shellfish have been previously refrigerated, the shellfish must be handled under refrigeration;
b) full records are kept;
c) shellfish is not mixed during re-packing; and
d) only clean, alive or chilled or frozen shellfish may be re-packed [HC Spec 23.22 (2)].

(3) The operator must ensure that if re-packing of shucked shellfish occurs:

a) shucked shellfish are not re-packed when the temperature of the chilled shellfish exceeds 4°C or the temperature of the frozen shellfish exceeds -18°C at the time of receipt, or the packages are not labelled in accordance with clause 23.23 in the Animal Products Notice: Specifications for Products Intended for Human Consumption 2020;
b) only shellfish that have been processed and have been kept in premises with an RMP may be re-packed;
c) full records are kept; and
d) shucked shellfish from different lots are not mixed during re-packing operation [HC Spec 23.22 (3)].

(4) The operator must ensure that each package:

a) containing re-packed product are labelled in accordance with the owners' instructions; and
b) is labelled with the registration number of the operator responsible for the re-packing [HC Spec 23.22 (4)].

6.2.2.4.2 Packaging

(1) The operator must develop and implement procedures, as appropriate, for:

a) ensuring the integrity, cleanliness, and freedom from contamination of packaging upon receipt; and
b) maintaining the packaging materials' integrity, cleanliness and freedom from contamination during storage and prior to use [HC Spec 7.2 (2), AC Spec 3.23 (3)].

(2) The operator must ensure that if any packaging is damaged, potentially affecting the fitness for intended purpose of product, the product must be:

a) handled in a manner that minimises contamination and the damage to the packaging is rectified; or
b) appropriately disposed of [HC Spec 7.2 (3), AC Spec 3.23 (4)]. Refer to 6.7: Non-complying Product and Recall and 6.8: Waste Management for requirements.

(3) The operator should ensure that opened cartons are re-closed and covered during storage to prevent dust contamination. Any wet plastic packaging should be disposed of rather than stored.

Guidance

Return unused packaging into store providing the packaging is re-wrapped to minimise contamination from dust and pests.

Draft for Consultation

6.2.2.4.3 Receipt and storage

(1) Packaging should be:

a) checked on arrival to ensure it is intact, clean, clearly labelled, and matches the order;
b) stored in a clean dry area, away from chemicals;
c) protected from contamination when not in use;
d) free from contaminating substances and objectionable odours; and
e) clean, unused and undamaged at point of use.

(2) Packaging materials including outer packaging (e.g. transportation outers and wraps, etc.) must be stored and handled in a manner that minimises contamination of the packaging or products (HC Spec 7.2 (2)].

(3) Do not take outer packaging materials (e.g. transportation outers and wraps, etc.), into storage or re-packing areas.

(4) Containers and packaging held in store should be securely wrapped and stored off the floor (e.g. on pallets, etc.) to minimise contamination.

6.2.2.4.4 Packing or re-packing process

(1) Ensure packing operations and equipment:

a) are not a source of contamination; and
b) minimise the contact of the product with the outside of the packaging.

(2) The operator must handle products with damaged packaging in a manner that will minimise:

a) the exposure or spillage of the product (e.g. products can be wrapped and sealed, etc.);
b) contamination or deterioration of the product; and
c) contamination of other products and the storage area [HC Spec 7.2 (3)].

(3) Re-packing of product with damaged packaging should occur in a manner that minimises contamination.

(4) Any product that has been detrimentally affected as a result of the packaging or packing damage, should be dealt with in accordance with the requirements of 6.7: Non-complying Product and Recall.

6.2.2.5 Storage of waste materials

(1) Refer to 6.8: Waste Management.

(2) Keep waste materials in covered pest-proof containers and regularly collect and dispose of.

(3) The operator should ensure that non-complying product is appropriately managed. Refer to 6.7: Non-complying Product and Recall.

6.2.2.6 Palletisation

(1) Palletisation refers to manual, semi-automated or robotic systems.

(2) This refers to the final stacking of products on pallets.

6.2.2.6.1 Palletisation using robotics

(1) Ensure the operator is competent with operating a robotic palletisation system.

(2) Ensure the grip of the robot is capable of handling the product or packaging types (e.g. glass bottles, cardboard boxes, shrink wrapped items or open trays, etc.).

(3) Ensure the layer orientation is optimised to maximise cartons per layer.

(4) Ensure there is no pallet overhang as the pressure from above cartons will damage packaging.

Draft for Consultation

(5) Where the carton dimensions allow, ensure carton layers are interlocked to increase pallet stability during storage and transport.

(6) Where interlocking is not possible, ensure carton layers are partially interlocked.

(7) Ensure the pallet is securely and evenly stacked to allow for safe handling.

(8) Ensure pedestrian walkways are painted on floors. Ensure personnel are aware of walkways and give way rules, and use these to navigate through the store.

(9) Ensure railings or safety barriers are located around all pedestrian walkways.

(10) Ensure personnel wear PPE (e.g. steel capped work boots, high-visibility clothing and safety glasses, etc.) when in the store.

(11) Ensure mirrors are placed at blind corners to increase visibility.

6.2.2.6.2 Inline palletisation

(1) Ensure the robot motion is synchronised with the conveyor speed to allow a reliable layer forming process.

6.2.2.6.3 Stretch or shrink-wrapping pallets

Guidance

Stretch wrap is a highly stretchable plastic film that is wrapped around cartons. The elasticity in the film secures the cartons during storage and transport.

Shrink wrap is applied loosely around the cartons and shrinks when heat is applied to the plastic.

Manually wrapping pallets
Begin wrapping the pallet from the base, wrapping tightly and repeating a couple of times to ensure there is a strong hold. Then progress to wrap upwards from the base, ensuring that each layer is tightly joined to the previous one.

Once you have reached the top of the pallet, wrap tightly and repeat a couple of times to ensure it is stable. Test the whole wrapped structure to ensure it is sturdy. If this is not the case, you may wish to consider working your way back down to wrap the structure with an extra layer. Once completed, tear the wrap and fold the end under one of the pallet edges.

Draft for Consultation

(1) Ensure the wrap is securely attached to a pallet corner before continuing to wrap the entire pallet.

(2) Ensure the wrap is gauged correctly to handle different sized loads during storage and transport.

(3) Ensure the wrap provides a waterproof barrier to prevent product damage.

(4) Ensure the wrap is durable and cannot be degraded due to sunlight, rain, chemicals or rain.

(5) Ensure wrapped pallets are labelled as per 6.3.2.3.1: Labelling of Transportation Outers to enable traceability to be maintained.

6.2.2.6.4 Forklift

(1) Ensure the operator is competent with operating a forklift (e.g. drivers have a forklift license).

(2) Ensure the forklift capacity (i.e. counterbalance) is more than the pallet weight.

(3) To have a safe lift, ensure the pallet is close to the front wheels.

(4) Ensure the forklift mass is in an upright (90°) position before inserting the forks into the pallet.

(5) Align and centre the fork's arms evenly from the centre stringer.

(6) Tilt the forks slightly backwards to ensure maximum security while transporting pallets.

(7) Ensure the operator sounds the forklift's horn at intersections, navigating blind corners, or accessing roller doors.

Guidance

Pre-operational safety checks include:

- check brakes, lights and horn before use;
- ensure reversing beeper and warning lights are operational;
- ensure seat belt or safety restraint is in good condition;
- know the capacity of the forklift before using it. Do not use a forklift without a load rating plate;
- check gas-powered vehicles for gas leaks in fuel lines;
- ensure the lifting forks are in sound condition and centred either side of the mast; and
- check tyre pressures. Never drive with a flat or under-inflated tyre.

Operational safety checks include:

- watch out for pedestrians;
- ensure the lifting tines are secure into the pallet and the load is stable before lifting or driving off;
- be careful of ceiling clearance or overhead obstructions when raising the mast;
- always remember that the safe working load of a forklift reduces as the mast is tilted forward;
- always put the heavy end of the load against the load backrest;
- when approaching a blind corner, use horn and drive slowly;
- always have someone guide you if a load restricts your vision;
- slow down when changing direction or on wet or greasy surfaces; and
- avoid harsh braking, especially when carrying a load.

Refuelling includes:

- for gas-powered vehicles, change gas bottles in a well-ventilated area clear of a naked flame or source of-ignition; and
- for battery-operated vehicles, charge in a well-ventilated area.

Ending operations and cleaning up includes:

- when stopping the forklift:
  - park on even ground and lower the forks to the ground;
  - shift the gear selector to park position and apply the parking brake; and
  - turn off the ignition and remove the keys; and
- for gas-powered vehicles, turn off gas and do not park near an ignition source, doorway or pit.

Refer to Worksafe for a forklift training module.

Draft for Consultation

6.2.2.6.5 Pallet jack

(1) Ensure the operator is competent with operating a pallet jack.

(2) Ensure the pallet jack capacity (i.e. counterbalance) is more than the pallet weight.

(3) Align and centre the fork's arms evenly from the centre stringer.

(4) When hauling loads, walk in front and partly to the side of the pallet jack, pulling it behind you.

(5) Ensure the operator travels with the load downhill when going up or down slopes.

6.2.2.7 Dispatch

(1) Ensure products follow a *first in, first out* (FIFO) or *oldest pack, first out* (OPFO) model.

(2) Refer to 6.3.2.3.1: Labelling of Transportation Outers for requirements.

Guidance

First in, first out (FIFO) refers to products which are received earlier will be dispatched first.

Oldest pack, first out (OPFO) refers to products with an older manufacturing or production date will be dispatched first.

6.2.2.7.1 Load-out of products

(1) Refrigerated products must be dispatched and loaded into refrigerated vehicles without unnecessary delay after removal from the cold store to ensure that required product temperatures are maintained [HC Spec 26.5 (2)].

(2) Products must be adequately protected from the elements and environmental contaminants during loading [HC Spec 26.4 (5)].

(3) All documentation accompanying outgoing products must be complete and accurate, and provide the necessary information for the effective identification and traceability of the products [HC Spec 9.3 (1) and 28.2 (1)].

6.2.2.7.2 Load-out checks

(1) Load-out checks for products include ensuring that the:

a) correct labelling is applied (refer to 6.3: Traceability, Inventory and Labelling);
b) product is at the required load-out temperature;
c) transport unit is suitable for loading product (e.g. temperature control, cleanliness, etc.); and
d) product is appropriately inventoried.

Guidance

The operator needs to ensure that the load-out checks required by clauses 2.1 and 2.2 of the Animal Products Notice: Official Assurances Specifications for Animal Material and Animal Products are carried out for export product.

6.2.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The frequency and type of monitoring will depend on the nature of the operation and the degree of risk if hazards are uncontrolled. Monitoring options include:

- daily checks of refrigerated products and storage areas to confirm that storage temperatures are met; and
- checks of all storage areas to confirm that products are stored to minimise contamination.

The operator should check, at least annually, that the documented procedures are appropriate.

6.2.4 Records

(1) The operator must monitor and keep records demonstrating the maintenance of the preservation temperature during storage [HC Spec 25.3 (2)].

(2) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(3) Keep the following records for storage:

a) inventory records (e.g. Inventory Ledgers, etc.);

Draft for Consultation

b) pest control (e.g. Pest Control Registers, Pest Control Checklists, etc.);
c) load-out dockets (e.g. Load-out Check Sheets) or consignment notes for goods;
d) transportation outers;
e) records of cleaning and maintenance of stores (e.g. Cleaning Schedules, Cleaning Forms, etc.);
f) refrigerator or temperature records (e.g. Automatic Temperature Recorder Checks, etc.); and
g) documentation accompanying incoming and outgoing consignments;
h) all RMP records (including verification records);
i) important correspondence with the RMP verifier and with MPI;
j) amendments and obsolete documents; and
k) training records for persons involved in key tasks (e.g. operating forklifts, etc.).

(4) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.3: Personnel Competencies and Training for requirements.
Refer to Part 5: Cleaning and Sanitation for requirements.
Refer to 6.1: Receipt of Incoming Materials for requirements.
Refer to 6.3: Traceability, Inventory and Labelling for requirements.
Refer to 6.5: Chemical Control for requirements.

Refer to the RMP Operators Resource Toolkit for examples of forms and procedures.

Draft for Consultation

6.3 Traceability, inventory and labelling

6.3.1 Purpose and scope

(1) To ensure that products are correctly identified sufficiently at receipt, re-packing, storage and dispatch for inventory control purposes and to allow for traceability in the event of a recall.

6.3.2 General requirements and procedures

6.3.2.1 Traceability

(1) The operator must have a documented tracking system that:

a) allows for the identification of all materials, throughout the entire chain (e.g. from receipt through to dispatch, etc.); and
b) enables the movement of products to be traced:
    i) where required by specifications, from the origin, through the supplier and the operator's business premises to the next recipient of the product; or
    ii) where specifications do not require tracing from origin, from the supplier and the operator's business premises to the next recipient of the product (e.g. for further processing, packing, or storage; distributed to; or sold to, etc.) [HC Spec 28.2 (1), AC Spec 5.3 (1)].

Guidance

If an operator is intending to export with an official assurance they should check the requirements for inventory control, transport conditions etc., which may include the need to undertake load-out checks. Refer to relevant OMARs.

(2) The operator must identify and track re-packed or re-labelled product to finished product to ensure any actual or potential risks are effectively managed [HC Spec 28.2 (2), AC Spec 5.3 (2)].

(3) All outgoing products must be clearly labelled and accompanied by appropriate documentation to ensure traceability of the product [HC Spec 8.3 (3) and 8.4 (1)].

Guidance

It is recommended that the operator maintain a "one step forward, one step backward" traceability system. This allows for the identification of where products have been received from and where they have been dispatched to.

Record the identification of all inputs (e.g. lot identification) released to re-packing each day. The more precisely an input can be traced to a specific product, the less product will be affected in the event that it needs to be held or recalled.

6.3.2.2 Inventory control

(1) An inventory control programme must be documented for product records maintained [HC Spec 9.2 (1), AC Spec 5.3 (3)].

(2) Inventories must be maintained for all products, and for non-complying materials and products [HC Spec 28.2 and 31.2 (1)].

(3) Clearly identify non-complying products and the reasons for non-compliance in the inventory.

(4) An RMP in respect of the storage or transport of dairy material must provide for the maintenance of the following records for all dairy material processed:

a) the source of the dairy material and when it was received; and
b) the destination of the dairy material and when it left or was delivered [Dairy Spec 36 (1)(v)].

(5) Procedures must be documented and implemented for the identification and tracking of all inputs (including rework but not packaging) and products, including imported products [APA Section 17, RMP Spec 11].

6.3.2.3 Labelling

(1) Products must be labelled in compliance with relevant regulatory requirements and agreed customer specifications [APA 44].

Guidance

The labelling requirements for non-dairy animal product for human consumption are specified in Part 8 of the Animal Products Notice: Specifications for Products Intended for Human Consumption.

The labelling requirements for animal products for animal consumption are specified in Part 4 of the Animal Products Notice: Specifications for Products Intended for Animal Consumption 2020.

(2) Products must be labelled in a manner that enables traceability to be maintained [HC Spec 28.2 (1)].

(3) Develop and implement written procedures for re-packing to ensure that:

a) the correct label is applied to each product and product unit;
b) labels are stored in a manner that maintains them in good condition;
c) damaged or obsolete labels are disposed of appropriately;
d) "one step forward, one step backward" traceability is maintained; and
e) inventory control is maintained.

Draft for Consultation

6.3.2.3.1 Labelling of transportation outers

(1) The operator must ensure that labelling on transportation outers, or accompanying documentation, states:

a) the product name or description;
b) storage directions, where necessary to maintain the product as fit for intended purpose;
c) lot identification;
d) in the case of fish product (except products containing mixed fish species), the scientific name of the fish is available on the MPI website;
e) in the case of minced fish, surimi, reformed fish, shark livers or multi-ingredient fish products that have undergone further processing, the scientific name (except missed fish species), either on the label of the transportation outer or on the accompanying documentation; and
f) in the case of shucked pāua that is intended for canning and is held at temperatures not exceeding 6°C, that the pāua is for canning in New Zealand only [HC Spec 8.3 (3)].

(2) The operator must ensure transportation outers containing product for animal consumption when leaving the premises are labelled to clearly identify:

a) the contents are not intended for human consumption;
b) the product name or description;
c) storage directions where necessary to maintain the fitness for its intended purpose;
d) lot identification, where applicable; and
e) the name and address of the operator [AC Spec 4.5 (1)].

(3) The label of the transportation outer of product that is not intended for human consumption but could be mistaken for, product that is intended for human consumption, must clearly indicate that the product it contains is not intended for human consumption [HC Spec 8.3 (4)].

(4) The operator may, instead of labelling the transportation outers as required under clause 6.3.2.3.1 (2), may provide accompanying documentation provided it contains the information specified in clause 6.3.2.3.1 (2) [AC Spec 4.5 (2)].

(5) If the status of the product's suitability changes, labelling must be changed or replaced to reflect this [HC Spec 8.5 (1)].

(6) If product is downgraded and is no longer intended to be traded for human consumption, any labelling must be removed or defaced at the consigning premises on:

a) the transportation outer;
b) accompanying documentation;
c) inspection legends; and
d) any other identification of the product as being suitable for human consumption [HC Spec 8.5 (2)].

(7) Any false or misleading labelling on reused or recycled packaging resulting from previous uses must be removed or defaced at the consigning premises [HC Spec 8.5 (3)].

(8) The operator must document an inventory control programme for products and maintain records [HC Spec 9.2 (1)].

6.3.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

Draft for Consultation

6.3.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for traceability, inventory and labelling:

a) an inventory system (either electronic or hardcopy) that allows products to be traced (e.g. consignment notes, etc.); and
b) load-in and load-out checks.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 6.2: Storage for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

6.4 Calibration

6.4.1 Purpose and scope

(1) To ensure that measuring equipment that is used to carry out critical measurements function as intended.

(2) Measuring equipment includes the following:

a) temperature measuring or recording devices (e.g. handheld thermometers, chiller and freezer thermometers, etc.); and
b) scales.

(3) It is recommended that calibration is also applied to equipment used in monitoring GOP parameters (e.g. refrigeration temperatures, etc.) and parameters (e.g. truck weights, etc.).

Draft for Consultation

6.4.2 General requirements and procedures

(1) The operator must ensure measuring equipment (whether stand-alone or integrated), that is used to provide critical measurements:

a) have the accuracy, precision and conditions of use appropriate to the task performed;
b) are calibrated:
    i) against a reference standard (e.g. shows traceability of calibration to a national or international standard of measurement, etc.); or
    ii) (if no such standard exists) be calibrated on a basis that is documented in, or incorporated by reference into, the RMP;
c) be uniquely identified (e.g. by using serial numbers, indelible tags or other permanent means of identification) to enable the traceability of the calibrations and to identify calibration status [HC Spec 6.2 (1), AC Spec 3.22 (1)].

6.4.2.1 Calibration programme

(1) The operator must ensure that calibration is undertaken by a suitably skilled person [HC Spec 6.2 (2), AC Spec 3.22 (2)].

(2) The operator must specify the minimum frequencies of calibration in the RMP for each piece of measuring equipment used to provide critical measurements or used as reference standards [HC Spec 6.2 (3), AC Spec 3.22 (3)].

Guidance

Frequency of calibration
When determining the minimum frequencies of calibration, an operator should consider the:
- level of use of the equipment;
- stability of the piece of equipment;
- nature of the measurement (i.e. degree of accuracy required); and
- manufacturer's instructions.

Some pieces of equipment (e.g. scales), which become inaccurate if moved, may require calibration after any such movements.

Procedures for calibrating the instrument
This can be achieved by using suitable testing facilities capable of providing certification to show the required traceability, or by using reference materials (e.g. certified test weights).

The Weights and Measures Act
- The Weights and Measures Act is administered by the Ministry for Business, Innovation and Employment (MBIE) and applies to all products sold by weight or by a measure (e.g. kilograms). MBIE's Trading Standard team enforces these rules. Further information can be found at the website www.consumerprotection.govt.nz and using the search term: "Trade Measurement".

The operator should replace the measuring equipment if they cannot be calibrated.

Critical measurements are measurements taken to confirm (directly or indirectly) the fitness for intended purpose of the product (e.g. measurements at a Critical Control Point (CCP)). The operator is responsible for determining the critical measurements for their operations. Critical measurements may be identified in an RMP or mandated as critical in the legislation (e.g. the preservation (load-out) temperatures).

The calibration requirements in HC Spec clause 6.2 apply only to equipment used to provide critical measurements. When developing an RMP, the operator should determine which of their processes require critical measurements to be taken, and document the result of this determination in their RMP. The calibration procedure should deal with the calibration of equipment used to take those measurements.

The operator should refer to the RMP Operator Resource Toolkit for example calibration forms, procedures and calibration frequencies.

(3) The operator must ensure safeguards are in place to prevent unauthorised adjustments to the calibration of the measuring equipment, including movement of the equipment where this may invalidate the calibration [HC Spec 6.2 (4), AC Spec 3.22 (4)].

(4) For equipment used for critical measurements, the programme should include the relevant elements listed below:

a) a description or list of the equipment used to take critical measurements (e.g. its name, make, model and/or other identification characteristics);
b) the person or agency who will perform the calibration;
c) the equipment location;
d) the means of permanently identifying the equipment (e.g. serial numbers, inedible tags). These should be recorded on the calibration record sheet;
e) the frequency of calibration required for each piece of equipment;
f) procedure for calibrating the instrument;
g) controls to minimise or prevent movement of the equipment if this could affect the calibration;

Draft for Consultation

h) the maximum error allowed before corrective action is taken (e.g. ± 1g, ± 1°C); and
i) how any corrective actions will be dealt with (e.g. identification and disposition of any product affected by the use of the device while it was out of order) [APA Section 17, RMP Spec 11].

(5) Routine in-house checks of measuring equipment should be carried out against reference standards at regular and established frequencies by suitably skilled personnel.

(6) Reference standards (e.g. reference thermometers or reference weights) must have a current calibration certificate before they can be used [AP Reg 14, HC Spec 6.2].

Guidance

Aside from a calibration certificate or certificate of accuracy, newly purchased measuring devices should be provided with written calibration instructions, including methods and frequencies.

Use a reference thermometer only for checking working thermometers. When calibrating CATRs that are used for non-critical measurements, verification against a calibrated thermometer would be acceptable.

6.4.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

Monitoring should also include regular checks to ensure calibration is up-to-date. The level of monitoring will depend on how frequently the device is calibrated (e.g. if annual calibration is required, the operator should schedule six-monthly checks).

The operator should check, at least annually, that the documented procedures are appropriate.

Draft for Consultation

6.4.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for calibration;

a) in-house calibration records;
b) certificates showing traceability to appropriate standard measurement;
c) identification, location and calibration status of equipment;
d) calibration schedules;
e) certificates of accuracy or calibration;
f) training records for persons involved in key tasks [RMP Spec 15 (3)]; and
g) verification records.

(3) The records must include monitoring carried out, problems identified and corrective action taken [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.3: Personnel Competencies and Training for requirements.
Refer to 6.3: Traceability, Inventory and Labelling for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

6.5 Chemical control

6.5.1 Purpose and scope

(1) To ensure the proper use and storage of maintenance compounds to prevent or minimise the contamination of product, packaging, equipment, and the processing or storage environment.

(2) Maintenance compounds include chemicals used for cleaning, sanitation, personnel hygiene, fumigation, pest control, and for repairs and maintenance.

Guidance

MPI approval of a maintenance compound, and the associated conditions, only relate to minimising the risk of contamination of product. The approval does not relate to the efficacy of the compound. The operator should approach their supplier for this information.

Dairy
If a store covers the storage of dairy products in their RMP, they should use maintenance compounds that are on the Approved Maintenance Compounds (Dairy) register.

Non-dairy
Refer to the register of Approved Maintenance Compounds (Non-dairy). The Approved Maintenance Compounds (Non-dairy) Manual outlines the requirements for use of approved maintenance compounds. In some situations when carrying out maintenance work, approval is not required. These exceptions are explained in the Manual.

Draft for Consultation

6.5.2 General requirements and procedures

6.5.2.1 Approved maintenance compounds for non-dairy products

(1) The operator must use only approved maintenance compounds, with the correct approval code, during storage operations [HC Spec 3.3 (1), AC Spec 3.17 (1)].

(2) The operator must store approved maintenance compounds:

a) in a designated area;
b) in sealed containers (or in a manner that prevents the maintenance compound from being a source of contamination); and
c) clearly labelled with the name(s) of the maintenance compound as approved or as they appear in the list of approved maintenance compounds contained in specifications [HC Spec 3.3 (2), AC Spec 3.17 (2)].

(3) The operator must use approved maintenance compounds in a way that minimises contamination including:

a) having directions for use readily available;
b) training of personnel on the safe use;
c) having clearly identified containers and implements used for measuring or pouring of maintenance compounds to ensure no inadvertent secondary use of these containers; and
d) having procedures for managing the disposition of any contaminated products, associated things, surfaces, etc. [HC Spec 3.3 (3), AC Spec 3.17 (3)].

(4) The operator must label all (decanted) containers of approved maintenance compounds with the name(s) of the maintenance compound as approved or as they appear in the list of approved maintenance compounds contained in specifications [HC Spec 3.3 (3)].

(5) Products and packaging contaminated by a maintenance compound, which adversely affects its fitness for intended purpose, must not be used for human or animal consumption [HC Spec 3.3 (3)(d)].

(6) The operator must develop written procedures for storage, handling and use of maintenance compounds [AP Reg 11 (3)].

(7) The operator must maintain a current register (list) of maintenance compounds on the premises [HC Spec 9.3].

Guidance

The inventory or list should contain any rodent or pest control compounds.

6.5.2.2 Chemical storage

(1) Store approved maintenance compounds in a designated area (e.g. shelf, cupboard, room, etc.) and keep separate from products, packaging and unapproved chemicals.

(2) The designated area(s) should be identified on the site plan.

(3) Keep chemicals in sealed labelled containers when not in use.

Guidance

Store chemicals that are "in-use" or for "immediate use" in storage and support areas, but only in quantities necessary for immediate use.

6.5.2.3 Handling of chemicals

(1) Train personnel in the correct access, handling and use of chemicals and provide access to documented directions.

(2) Ensure all containers or tools (e.g. measuring cylinders, jugs, scoops, funnels, etc.) used for measuring or pouring chemicals are:

a) used for that purpose only (e.g. labelled 'for chemical use only'); and
b) not used for measuring food or products.

6.5.2.4 Use of chemicals

(1) Any chemicals must be used according to the directions of the manufacturer and used in a way that does not adversely affect the safety or suitability of products (the conditions of the MPI approval) [AP Reg 11 (4)].

(2) Procedures for use must be readily available to the user (e.g. on the label, posted on the wall, in chemical information sheets or material safety data sheets, etc.) [RMP Spec 19].

(3) The handling or use of chemicals should be by (or under the supervision of) a suitably skilled person.

Guidance

Usually the use of chemicals is considered a key task in the RMP and so the competencies for this task are expected to be specified in the RMP.

6.5.2.5 Non-approved maintenance compounds

(1) Non-approved maintenance compounds may be used in staff rooms, kitchens, yards, etc.

(2) Manage non-approved maintenance compounds by:

a) storing them separately from approved maintenance compounds; and
clearly identifying them as not to be used in processing or storage areas.

Draft for Consultation

Guidance

Non-approved maintenance compounds within an RMP boundary may not be permissible for export premises. Check OMARs for each individual country exported to.

6.5.2.6 Disposition of contaminated materials

(1) When chemical contamination occurs, the following actions must be carried out:

a) affected product should be retained for assessment by a suitably skilled person, to determine its suitability for human consumption, animal consumption or for some other purpose [HC Spec 25.4 (2)];
b) affected product must be appropriately disposed of if it is no longer fit for any purpose [HC Spec 3.3]; and
c) affected packaging materials that cannot be effectively cleaned and sanitised must not be used for packaging of any products and should be disposed of [HC Spec 7.2 (4), AP Reg 16].

(2) Reuse of empty chemical containers may be permitted provided that they are not to be used in a way that could contaminate products or packaging.

(3) Refer to 6.7: Non-complying Product and Recall and 6.8: Waste Management for requirements.

6.5.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

Monitoring options include:
- daily and weekly checks to confirm chemicals are being handled and used correctly; and
- annual (or when new chemicals are purchased) checks to confirm that maintenance compounds are approved and identified on any company list.

The operator should check, at least annually, that the documented procedures are appropriate.

6.5.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for chemical control:

a) inventory or list of current maintenance compounds used and held in the premises (e.g. Chemical Register, etc.);
b) any chemical information sheets or material safety data (MSD) sheets provided by the supplier, including instructions for handling and use;
c) site plan (i.e. location of chemicals);
d) consignment notes; and
e) personnel training records.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept in a daily diary, logbook, record form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.3: Personnel Competencies and Training for requirements.
Refer to 6.3: Traceability, Inventory and Labelling for requirements.

Draft for Consultation

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

6.6 Pest control

6.6.1 Purpose and scope

(1) To ensure the effective control of pests so as to prevent or minimise the contamination of products, packaging, equipment, and the storage environment.

(2) Pests include rodents, birds, insects, dogs and cats.

6.6.2 General requirements and procedures

6.6.2.1 Pest control programme

Guidance

The operator may employ a pest control person or agency to develop and implement a pest control system (e.g. set up traps, spraying programme) and monitor the premises. The operator is responsible for ensuring that the person or agency responsible is competent to perform the task and that they meet the requirements of the APA.

(1) The operator must develop and implement pest control procedures to minimise the exposure of product, or associated things, to hazards associated with pests [HC Spec 29.2 (1), AC Spec 3.24 (1)].

(2) The operator must use only approved maintenance compounds for pest control that are approved for that purpose [HC Spec 29.2 (2), AC Spec 3.23 (2)]. Refer to 6.5: Chemical Control.

(3) The operator must ensure that the pest control procedures include:

a) the suitably skilled person(s) or suitably skilled agency contracted for the implementation of the procedures if contracted out;
b) procedures for the control of pests;
c) the location of rodent bait stations and electric insect traps, marked on a site or building plan, or other suitable records;
d) the monitoring and verification of the procedures; and
e) corrective action procedures that are to be applied in the event of loss of control [HC Spec 29.2 (3), AC Spec 3.24 (3)].

(4) The operator must develop and implement a pest control programme with effective procedures that:

a) appropriately and adequately control pests;
b) minimises the exposure of products, packaging, equipment and the storage environment to hazards associated with pests; and
c) minimises the contamination from chemicals by managing their use [AP Reg 11 (1) to (3)].

(5) Include in the programme (but is not restricted to):

a) who is responsible for the pest management activities;
b) how buildings are pest-proofed (e.g. self-closing doors, fly screens, drain traps, etc.);
c) external areas within the RMP boundary;
d) how pests are killed and prevented from breeding;
e) how pesticides and pest management equipment (including rodent bait stations, electric insect killers, traps, etc.) are used in the control of pests;
f) the methods used to monitor the presence of pests and the effectiveness of pest control; and
g) the corrective actions to be taken when pests are detected, including disposing of any contaminated products, including dead pests. Refer to 6.7: Non-complying Product and Recall and 6.8: Waste Management for requirements.

Draft for Consultation

6.6.2.2 Prevention of infestation and access of pests

(1) The operator must:

a) keep premises and storage facilities (including water storage tanks) in good repair and condition to prevent pest access and to eliminate potential breeding sites;
b) keep holes, drains and other places where pests are likely to gain access sealed, or covered with screens or similar materials that prevent the entry of pests;
c) keep unscreened external doors closed at all times when not in use;
d) keep internal and external areas of the premises clean and tidy;
e) regularly check the external environment and keep free of any food source and breeding sites (e.g. long grass, bird's nest, etc.);
f) not permit dogs, cats and other mammalian pests to enter storage areas; and
g) keep waste materials that are held outside in covered pest-proof containers which are regularly collected and disposed of [HC Spec 29.3 (1), AC Spec 3.24.1 (1)].

Guidance

Use mesh screens on windows, doors, ventilators and other openings in the processing and packing areas that may be kept open during operations, to prevent the entry of insects, birds, and other pests. Refer to 3.2: Building Design and Construction for requirements.

Spray areas that are likely to attract flies and other insects, as necessary.

Ensure roadways and car parks are tar sealed or concreted.

Ensure landscaped areas (e.g. shrubs, trees, grass) are not in close proximity to buildings where product is processed.

Cover and store unused equipment on hard standings away from buildings where product is processed or stored. Storage on grassed areas may increase the likelihood of pest harbourage due to the difficulties of maintaining the grass height. Refer to 4.3.6: External Environment for requirements.

6.6.2.3 Use of pesticides

(1) The operator must consider any suspect or potentially contaminated products, or associated things (due to failure(s) to adhere to label use or approved condition requirements as required under ACVM Act) as unfit for human consumption until determined otherwise [HC Spec 29.4 (1), AC Spec 3.24.2 (1)(b)].

(2) The operator must handle, use and store pest control chemicals (e.g. rodenticides and insecticides) according to the control procedures given in 6.5: Chemical Control [AC Spec 3.24.2 (1)(a)].

(3) When specified in the conditions of use set in the Approved Maintenance Compounds (Non-dairy) Manual:

a) products and exposed packaging should be removed from the area or protected (e.g. covered) prior to using pest control maintenance compounds that may contaminate them; and
b) equipment should be cleaned by thorough washing after exposure to a pest control maintenance compound (i.e. after spraying with insecticide).

(4) The operator must use only approved maintenance compounds, with the correct approval code, during storage operations [HC Spec 3.3 (1)]. Refer to 6.5: Chemical Control for requirements.

Guidance

Insecticides that have residual activity or are dispensed as continuous aerosols should not be used in any storage area in a way that could contaminate products or packaging.

Draft for Consultation

6.6.2.4 Use of pest traps, bait stations and insect traps

(1) The operator must:

a) locate pest traps (including rodent boxes, bait stations and electric insect traps) where they do not present a risk of contamination to product or associated things;
b) only use rodenticides in bait stations;
c) regularly check bait stations for the following:

i) correct location as indicated in a site or building plan, or other suitable record;
ii) the presence of bait;
iii) evidence of pest activity; and
iv) boxes are in good working condition;

d) ensure insect traps, which include ultra-violet lamps, pheromone traps and any other form of attractive device are:

i) constructed to allow secure capture and removal of insects; and
ii) sited so there is no potential contamination from insects falling on to product or packaging;

e) monitor traps and stations at a frequency relative to the type of trap and the degree of pest activity observed. Increased monitoring and appropriate corrective actions must be taken if increased rodent activity is observed [HC Spec 29.5 (1), AC Spec 3.24.3 (1)].

(2) Bait stations should not be located inside any re-packing areas.

(3) Only use rodenticides in bait stations.

(4) Insect traps, which include ultra-violet lamps, pheromone traps and any form of attractant device should not cause any air-borne contamination.

(5) Ensure pest traps, bait stations, insect traps and rodenticides are used as per the manufacturers' or suppliers' directions.

Draft for Consultation

Guidance

Numbering pest traps may make identifying them on a site or building plan easier.

All agricultural chemicals should be considered toxic to humans unless there is evidence to show they are not.

Secure rodenticides within bait stations.

Due to animal welfare restrictions, adhesive traps may only be used for insect traps. These may be suitable for use in re-packing areas.

6.6.2.5 Handling and disposition of contaminated materials

(1) The operator must ensure where there is evidence of contamination of product or associated things from pests or residues, the following actions are carried out:

a) the affected product must be assessed to determine its acceptability for human consumption;
b) the affected surfaces should be cleaned and sanitised prior to reuse; and
c) affected packaging materials that cannot be effectively cleaned and sanitised must not be used for packing any products [HC Spec 29.6 (1), AC Spec 3.24.4 (1)].

(2) The requirements and procedures for non-complying products (also referred to as non-conforming products) given in 6.7: Non-complying Product should be complied with.

6.6.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

(2) Pest traps should be checked regularly:

a) to ensure they are legibly identified and correctly located as indicated in the site or building plan, or other suitable records;
b) for presence of bait (where needed);
c) for evidence of pest activity (e.g. nibbled bait, missing bait, droppings, etc.); and
d) to check that the traps are in good working condition.

Guidance

Monitoring options include:
- daily visual checks of storage areas for any signs of pest activity;
- monthly checks on integrity of pest proofing (e.g. screens, seals, etc.); and
- monthly checks of pest traps or bait stations.

When determining monitoring frequency for bait stations and pest traps, the operator should consider the type of traps used and the level of pest activity. Adhesive boards can often give a good indication of insect levels and should be changed often. If pest activity increases, monitoring frequency should increase and appropriate corrective actions taken.

The operator should check, at least annually, that the documented procedures are appropriate.

6.6.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for pest control:

a) details of the contracted pest control person or agency, if applicable;
b) observations from monitoring, including any evidence of pests;
c) location of pest traps or bait stations (e.g. site or building plan, etc.);
d) list of approved maintenance compounds used; and
e) name, amount and point of use of any pesticides used.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept in a diary, logbook, record or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.3: Personnel Competencies and Training for requirements.
Refer to 6.5: Chemical Control for requirements.

Refer to the RMP Operator Resource Toolkit for examples of forms and procedures.

6.7 Non-complying product and recall

6.7.1 Purpose and scope

(1) To ensure the correct handling and disposition of non-complying products.

Draft for Consultation

(2) To ensure a system is in place for the recall of products that are not fit for intended purpose from distribution or sale.

6.7.2 General requirements and procedures

Guidance

For cold and dry stores, it is likely that the owners of the stored products will initiate and implement a recall. When this is the case, the store operator will only need to document the specific activities that the store will be involved in (e.g. identification and isolation of affected products, inventory of affected products, communication with owners and the regulator, etc.).

Stores may need to be involved in trial or mock recalls from time to time on behalf of the owners of products. Stores should also run their own trial or mock recalls.

(1) Ensure that non-complying products are appropriately managed.

(2) The operator must develop and implement procedures for the identification, handling, storage and disposition of any non-complying product. The procedures must facilitate the traceability and inventory control of any non-complying products [HC Spec 31.2 (1), AC Spec 3.25 (1)].

(3) This should include determining whether any other products have been detrimentally affected as a result of the non-compliance and taking appropriate actions to manage this.

(4) The operator must handle and store non-complying products in a manner that prevents:

a) contamination and deterioration of other products; and
b) contamination of product and associated things (e.g. the storage environment) [HC Spec 31.2 (2), AC Spec 3.25 (2)].

(5) The operator must ensure that non-complying products (e.g. damaged, spoiled, deteriorated or contaminated products, etc.) are:

a) clearly identified;
b) segregated from other products and associated things;
c) recorded in inventory (e.g. unavailable for load-out, etc.); and
d) held within the premises until disposition is determined by a suitably skilled person or, in certain cases, by an Animal Products Officer or RMP verifier [HC Spec 31.2 (3), AC Spec 3.25 (3)].

(6) The store operator should be directed on how to dispose of any non-complying product by a suitable skilled person (e.g. product owner).

Draft for Consultation

Guidance

Recall requirements are currently described in the Animal Products (Risk Management Programme Specifications) Notice 2008 and procedures in the RMP Manual.

The operator should refer to the RMP Operator Resource Toolkit for example non-compliance forms and procedures found on the MPI website link or by searching on “RMP operators”.

Guidance on managing recalls can be found on the MPI website or search on ‘recalls’.

(7) The RMP operator must notify the RMP verifier without unnecessary delay, when there is any significant concern about the safety or suitability of any of the stored products [RMP Spec 13 (3)(a)].

Guidance

Appropriate actions of any non-complying products may involve one or a combination of the following, depending on the nature and extent of the problem:

- restricted release of products;

- re-grading of products for an alternative use (e.g. petfood, stockfood, etc.);
- re-packing;
- rejection (disposition); and
- withdrawal or recall of products which have been distributed for sale.

Guidance on managing non-compliances can be found on the MPI website or search on 'ENC'. This includes raising an export non-compliance (ENC) for export product where appropriate.

(8) Identify the root cause(s) of the problem and address these by the corrective actions.

(9) Ensure corrective actions are carried out in an effective and timely manner.

(10) Maintain a register for corrective actions, including follow-up checks (e.g. internal audits, other operator verification activities, external audits, etc.).

6.7.2.1 Extenuating circumstances

Guidance

Extenuating circumstances may include:
- unforeseen events (e.g. floods, fires, earthquakes, etc.);
- pandemic (e.g. COVID-19, etc.);
- replacement equipment and parts not being available immediately;
- unavailability of contractors;
- boil water notice for council supplied water; or
- power failure.

(1) Ensure any issue is managed appropriately and risk to product is minimised.

(2) Report the following to the RMP verifier:

a) a description of the problem and any affected product;
b) a summary of the assessment made; and
c) any corrective actions taken to prevent the recurrence of the non-compliance.

6.7.2.2 Preventative actions

(1) Preventative actions to minimise the occurrence of non-conformance or non-compliance may include:

a) amending documented programmes to correct deficiencies;
b) increasing the frequency of inspections or internal audits;
c) revising supervision or training programmes when staff, visitors or contractors are not following GOP as required;
d) managing repeat offenders; and
e) a series of escalating responses for repetitive non-conformances.

6.7.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

6.7.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for non-complying products and recalls:

Draft for Consultation

a) inventory or list of non-complying products;
b) load-out dockets or consignment notes for products;
c) incident reports, records of assessment and disposition of non-complying product;
d) recall records, including mock recall records;
e) any correspondence with the RMP verifier or MPI; and
f) trend assessments of monitoring.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 6.2: Storage for requirements.
Refer to 6.3: Traceability, Inventory and Labelling for requirements.
Refer to 6.8: Waste Management for requirements.

Refer to the RMP Operators Resource Toolkit for examples of forms and procedures.

6.8 Waste management

6.8.1 Purpose and scope

(1) To ensure that waste materials are effectively managed and are not a source of contamination to products, storage areas, equipment or personnel.

6.8.2 General requirements and procedures

(1) For the purposes of this clause, waste includes:

a) product that has been assessed as unsuitable or unfit for any purpose and is awaiting disposal;
b) food additives and ingredients assessed as unsuitable or unfit for any purpose and is awaiting disposal; and
c) non-product waste (e.g. damaged packaging, disposable gloves, etc.) awaiting disposal [HC Spec 30.2 (1), AC Spec 3.16 (1)].

(2) The operator must ensure that waste is kept under controlled conditions and adequately identified in a manner that will ensure that it will not be mistakenly or fraudulently released as fit for any intended purpose [HC Spec 30.2 (2), AC Spec 3.16 (2)].

(3) The operator must ensure that equipment and storage areas used to store or contain waste are:

a) clearly identified, and if equipment is permanently installed and in an identified storage area then either the equipment or the storage area may be identified; and
b) not be sources of contamination to other product (e.g. potential breeding sites for pests) [HC Spec 30.2 (3), AC Spec 3.16 (3)].

(4) The operator must ensure that waste is disposed of:

a) by a method that ensures that it will not become a source of contamination to other product; and
b) regularly and in a timely manner [HC Spec 30.2 (4), AC Spec 3.16 (4)].

(5) The operator must effectively manage waste material to minimise pest activity, offensive odours and contamination of product, storage areas, equipment and personnel [AP Reg 11 (1)].

(6) The operator must ensure that equipment and storage areas used to store or contain product that is not suitable for processing, or product that is not fit for human consumption but is suitable or fit for some other purpose, is:

Draft for Consultation

a) clearly identified;
b) physically separated from product suitable for human consumption; and
c) not a source of contamination to other product that is intended for human consumption [HC Spec 25.4 (1), AC Spec 3.13 (1)].

(7) The operator must ensure that product that is not suitable for processing, or not fit for human consumption but is suitable or fit for some other purpose, is kept under controlled conditions until it is adequately identified in a manner that will ensure that it will not be mistakenly or fraudulently released as suitable for processing or fit for human consumption [HC Spec 25.4 (2)].

(8) Dispose of empty chemical containers in accordance with manufacturer's instructions.

Guidance

The operator should physically separate (or separate by distance and time) unsuitable product from suitable product, e.g.:
- packaged product can be stacked on separated pallets; or
- drums of contaminated product can be stacked in a separate designated area, etc.

Waste streams can be used as an input into another product. In this case the input would not be considered waste to the receiver. The receiver would need to ensure that it is not a source of hazard.

Waste management applies to all areas within the physical boundaries of the site, including facilities, support areas and the external environment.

6.8.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The frequency and type of monitoring will depend on the nature of the operation and the degree of risk if hazards are uncontrolled.

The operator should check, at least annually, that the documented procedures are appropriate.

6.8.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for waste management:

a) general hygiene check for storage areas, facilities and external environment;
b) daily or weekly checks; and
c) pest control records.

(3) These records must include monitoring carried out, problems identified and corrective action(s) taken (e.g. restoration of control, product disposition and prevention of recurrence) [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to Part 5: Cleaning and Sanitation for requirements.
Refer to 6.6: Pest Control for requirements.

Draft for Consultation

Refer to the RMP Operators Resource Toolkit for examples of forms and procedures.

6.9 Transport

6.9.1 Purpose and scope

(1) To ensure products are transported in a manner that minimises contamination and ensures that it is fit for its intended purpose.

6.9.2 General requirements and procedures

6.9.2.1 Transport in the RMP

(1) Transport should be included in the RMP as a supporting system where you are transporting products (e.g. using your own truck(s)). This means transport will be included in verification audits and operator verification activities as part of the RMP.

(2) Alternatively, a transport regulated control scheme (RCS) or a transport RMP can be registered.

(3) Refer to 6.10.2.3: Transport of Dairy Material or Dairy Product for requirements.

6.9.2.2 Design and construction of transportation units

(1) The operator must ensure that transportation units and loading equipment:

a) are designed, constructed, equipped and operated to maintain the status of the product as suitable for processing and fit for intended purpose; and
b) minimise the hazards and other risk factors [HC Spec 26.2 (1), AC Spec 12.2 (1)].

(2) The operator must ensure that transportation units are:

a) constructed from materials that will maintain product suitable for processing and fit for intended purpose; and
b) designed and constructed to be easy to clean, maintain and inspect [HC Spec 26.2 (2), AC Spec 12.2 (2)].

(3) The operator must ensure that if a transportation unit has the means by which product is refrigerated, including:

a) that the unit is designed, constructed and equipped to ensure that the specified temperatures are achieved and maintained throughout transportation; and
b) that there is a means of monitoring and maintaining the temperature of the unit [HC Spec 26.2 (3), AC Spec 12.2 (3)].

(4) The operator must ensure that the temperature-measuring devices used to measure preservation temperatures are calibrated and located to measure the internal temperatures at the warmest point [HC Spec 26.2 (4), AC Spec 12.2 (4)].

6.9.2.3 Hygiene for transport

(1) The operator must ensure that the hygiene of transportation units and loading equipment minimises the opportunity for contamination and deterioration of product [HC Spec 26.3 (1), AC Spec 12.3 (1)].

(2) The operator must ensure that the hygiene and behaviour of persons involved in the transportation of product minimise the contamination and deterioration of product from this source [HC Spec 26.3 (2), AC Spec 12.3 (2)].

Guidance

Refer to 2.2: Personnel Health and Hygiene and Part 3: Design, Construction and Maintenance of Building,

Draft for Consultation

Facilities and Equipment for requirements.

6.9.2.4 Operational requirements

(1) The operator must ensure transportation units are operated in a manner that:

a) minimises the opportunity for cross-contamination, spoilage or deterioration of product;
b) maintains any refrigerated product within the preservation temperatures;
c) minimises the opportunity for the substitution or adulteration of product; and
d) minimises the likelihood of the packaging of product being damaged [HC Spec 26.4 (1), AC Spec 12.4 (1)].

Guidance

Preventing substitution or adulteration can include limiting access to company personnel to transportation units, ensuring supervision of load-ins and load-outs, etc. Refer to 6.2.2.7: Dispatch for requirements.

(2) The operator must adequately separate any product that is transported together with any other product or any other thing that may be a source of contamination unless adequately protected in a manner that prevents cross-contamination [HC Spec 26.4 (2), AC Spec 12.4 (4)].

(3) The operator must not accept refrigerated product from the primary processor for transportation until the preservation temperature has been met as specified in either:

a) the Act or the Food Act 2014; or
b) the RMP [HC Spec 26.4 (3)].

(4) The transportation process must not be used as a cooling step [AC Spec 12.4 (5)].

(5) The operator must ensure that the determination of the temperature of product, or taking of any samples, is carried out in such a manner that minimises the contamination of that product [HC Spec 26.4 (4), AC Spec 12.4 (7)].

(6) The operator must ensure that any product packaging is protected from environmental elements [HC Spec 26.4 (5)].

(7) The operator must ensure that persons transporting product are aware of the relevant requirements and are adequately trained [AC Spec 12.4 (9)].

Guidance

Refer to 2.3: Personnel Competencies and Training for requirements.

6.9.2.5 Maintaining preservation temperatures

(1) The operator must monitor and keep records as evidence of the maintenance of the preservation temperature during transportation (including transhipment) to prove that the suitability for processing of the product or the fitness for intended purpose is maintained [HC Spec 26.5 (1), AC Spec 12.4 (6)].

(2) The operator must load and unload refrigerated products without unnecessary delay to assist in maintaining preservation temperatures [HC Spec 26.5 (2)].

(3) The operator must have a documented contingency plan to deal with any failure to maintain fitness for intended purpose (e.g. preservation temperature) during transportation that may affect the fitness for purpose of the product, including:

a) immediate notification to the person who has responsibility for the product; and
b) actions to prevent recurrence [HC Spec 26.5 (3), AC Spec 12.4 (8)].

Draft for Consultation

Guidance

Refer to 6.4: Calibration for requirements.

Refer to 6.2.2.7: Dispatch for load-out of products and checks.

6.9.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The frequency and type of monitoring will depend on the nature of the operation and the degree of risk if hazards are uncontrolled. Monitoring options include:

- checks for transport vehicles to confirm they are in a condition that minimises contamination of the products; and
- temperature checks of refrigerated vehicles.

The operator should check, at least annually, that the documented procedures are appropriate.

6.9.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for transport:

a) load-in and load-out checks;
b) container or vehicle checks;
c) cleaning checks;
d) calibration records; and
e) maintenance of preservation temperature or condition during transportation.

(3) The records must include monitoring carried out, problems identified and corrective action taken [RMP Spec 20 (2)].

Draft for Consultation

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.
Refer to 2.3: Personnel Competencies and Training for requirements.
Refer to 6.2: Storage for requirements.
Refer to 6.4: Calibration for requirements.

Refer to the RMP Operators Resource Toolkit for examples of forms and procedures.

6.10 Other requirements specific to dairy

6.10.1 Purpose and scope

(1) To ensure that the operator complies with other legal requirements which are specific to dairy.

6.10.2 General requirements and procedures

Guidance

store means a premises (not being a dairy factory or farm dairy or a retail shop or store ancillary to a dairy factory or farm dairy) used for storing dairy material or dairy product:

a) at any time after collection from a farm dairy and prior to delivery of the material to the place of sale for consumption or for end use for purposes other than consumption; or
b) prior to its export

6.10.2.1 Non-operating dairy stores

(1) All premises under a registered RMP are assumed to be operating with their RMP in full effect until the Director-General registers an amendment to the programme following application by the operator of the RMP under section 25 of the Act, or until the Director-General withdraws registration [Dairy Processing Spec 33 (1)].

(2) To maintain registration of a non-operating premises under the RMP, the company shall either;

a) maintain the premises in an operational state under a registered and verified RMP; or
b) prepare a specific "non-operational" RMP which includes any special arrangements made for mothballing, and make application to the Director-General for registration of an amendment in accordance with section 25 of the Act [Dairy Processing Spec 33 (2)].

Guidance

For further details on the requirements for non-operating dairy stores, refer to DPC 4: Animal Products (Dairy): Approved Criteria for Storage and Transportation of Dairy Material and Products clause 11.

6.10.2.2 Requirements for stores

(1) Dairy material and dairy products must be stored only in premises specified for the purpose within the RMP for the class or description to which the product belongs and assigned a unique location identifier approved by the Director-General [Dairy Processing Spec 34 (1)].

(2) The Director-General may issue a RMP location certificate to premises operating under an RMP and this certificate must be prominently displayed at the location at all times [Dairy Processing Spec 34 (3)].

6.10.2.3 Transport of dairy material or dairy product

(1) The operator must provide for the following during transport of dairy material:

a) keeping dairy material and dairy product clean;
b) handling dairy material and dairy product so as to minimise;
    i) the risks of contamination, spoilage or deterioration;
    ii) the proliferation of pathogenic microorganisms; and
    iii) the development of toxins;
c) ensuring the cleanliness for the transport of dairy material or dairy products of that class or description or form to ensure the fitness for the intended purpose is maintained;
d) maintaining the following records for all dairy material processed:

Draft for Consultation

i) the source of the dairy material and when it was received; and
ii) the destination of the dairy material and when it left or was delivered [Dairy Processing Spec 37].

6.10.2.4 External verification non-compliance

(1) Operating other than in accordance with the Dairy Processing Spec is an offence under Part 10 of the Act [Dairy Processing Spec 42].

(2) If a dairy processor or RMP operator does not operate in accordance with the requirements specified in this Dairy Processing Spec:

a) an Animal Products Officer may seize and detain or condemn dairy material or dairy product under section 90 of the Act;
b) an Official Assessor acting under section 93 of the Act, may condemn dairy material or dairy product under section 90 of the Act;
c) export certification may be suspended;
d) the Director-General may consider exercising his powers to remove the RMP from the register under section 28 of the Act;
e) prosecution for offences may occur; and
f) any other action may be taken as provided for by the Act [Dairy Processing Spec 42].

6.10.3 Monitoring

(1) The operator must regularly check ongoing compliance with documented procedures [APA Section 17].

Guidance

The operator should check, at least annually, that the documented procedures are appropriate.

6.10.4 Records

(1) Keep records to demonstrate compliance with the requirements [RMP Spec 20 (2)].

(2) Keep the following records for requirements specific to dairy:

a) non-complying products including disposition of products; and
b) transport.

(3) The records must include monitoring carried out, problems identified and corrective action taken [RMP Spec 20 (2)].

Guidance

Records may be kept as a daily diary, logbook, completed form or checklist.

Refer to 2.1: Document Control and Record Keeping for requirements.

Refer to the RMP Operators Resource Toolkit for examples of forms and procedures.

Draft for Consultation

Part 7: HACCP application

7.1 Introduction

7.1.1 Purpose and scope

(1) This Part of the Code has been developed by MPI, in consultation with an industry working group, to provide guidance on the application of Hazard Analysis and Critical Control Point (HACCP) principles to the storage of products, including dairy. It also covers the identification and control of risk factors related to the wholesomeness of products.

(2) To ensure the correct application of hazard analysis to minimise any hazards that are likely to be present.

7.1.2 HACCP

(1) HACCP is a systematic and science-based control system for assuring food safety. Food safety is achieved by assessing hazards and developing controls for them. HACCP focuses on preventative measures and ensures that process control moves away from dependence on a traditional approach of endpoint product testing. It is internationally recognised as the foremost means of assuring food safety.

(2) The operator must apply HACCP principles to their process when developing their risk management programmes (RMP) [APA 13, AP Reg 6].

7.1.2.1 Hazard

(1) A hazard is a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect:

a) biological hazards include pathogenic microorganisms (e.g. *Salmonella* spp., *Clostridium* spp., *Bacillus* spp., *Listeria monocytogenes*, etc.), viruses (Norovirus, *Hepatitis* A virus, etc.), and parasites (e.g. *Giardia*, *Cryptosporidium*, etc.);
b) chemical hazards include residues of heavy metals, pesticides, allergens, and veterinary medicines. Some food additives may also be hazardous if present in excessive or toxic amounts; and
c) physical hazards are objects that may cause illness or injury (e.g. glass, plastic, bone, metal fragments, etc.).

(2) Hazards may occur in the product as a result of:

a) inputs (e.g. raw material, ingredients, packaging, etc.);
b) the process itself; or
c) direct or indirect contamination from “other sources” (e.g. personnel, water, pests, waste, equipment, internal or external environments, etc.).

(3) The operator must ensure that identified hazards from these sources are adequately addressed in the RMP by control measures under GOP (i.e. supporting systems) or at Critical Control Points (CCP) [APA 17].

7.1.3 General requirements and procedures

(1) The operator must specify any uncontrolled hazards that are likely to be present in products leaving the physical boundaries of the RMP and the operator must be able to justify that this is appropriate considering the intended use of the product [RMP Spec 10].

(2) The operator must ensure there are sufficient procedures to ensure that:

a) products subject to the RMP are fit for its intended purpose and that it complies with the programme; and
b) legislative requirements (including regulatory limits) are met [RMP Spec 11 (1)].

Draft for Consultation

(3) The procedures must cover:

a) good operating practice (GOP);
b) identifying, controlling, managing, eliminating, or minimising risk factors [APA 17 (2)];
c) conduct a hazard analysis (as defined by Codex below):

i) determine the Critical Control Points (CCP);
ii) establish critical limits;
iii) establish a system to monitor control of the CCP;
iv) establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control;
v) establish procedures for verification to confirm that the HACCP system is working effectively; and
vi) establish documentation concerning all procedures and records appropriate to these principles and their application; and

d) any corrective action procedures that are to be applied in the event of loss of control, including:

i) how control will be restored;
ii) how any affected products will be identified, controlled or disposed of;
iii) any measures to be taken to prevent recurrence of the loss of control; and
iv) where the loss of control is due to unforeseen circumstances and there is no specific corrective action already documented, nomination of a suitably skilled person to manage the corrective action, recording of the issue and corrective actions taken, and reporting of such matters to the recognised RMP verifier without unnecessary delay [RMP Spec 11].

(4) The operator must specify the following for each identified CCP:

a) the justification for its identification; and
b) the critical limits to be met and the justification for those limits [RMP Spec 11].

(5) An operator whose products and processes are adequately covered by the HACCP application in this document can use this for developing their RMP. The relevant HACCP sections of this Code can be copied into the RMP, or they can be incorporated into the RMP by reference. The operator may need to make some changes in the HACCP application to ensure that it accurately reflects the products and processes covered by their RMP.

(6) The operator must apply these HACCP principles to the process, including all inputs [APA 12 and 17, and RMP Spec 11]. The operator is not required to carry out hazard identification and analysis for "other sources" (e.g. personnel, environmental sources, etc.), which are expected to be controlled by GOP (supporting systems).

(7) The operator must review their HACCP application whenever changes in the product, process and/or premises are made [RMP Spec 22].

Guidance

Applying these principles is discussed in detail in the Risk Management Programme Manual.

7.1.4 Good Operating Practice (GOP)

(1) GOP is discussed in 1.3: Documentation of GOP. Supporting systems covering GOP must be developed and documented prior to HACCP application [RMP Spec 11]. The HACCP approach used in this Code is based on the expectation that GOP systems are effectively being implemented.

7.1.5 HACCP application for products and processes covered by this Code

(1) The HACCP application shown in this document covers the following processes:

a) further chilling of animal products, including dairy, (i.e. products are received already chilled and they are further cooled in the store to a lower temperature);

Draft for Consultation

b) freezing of chilled products;
c) refrigerated or ambient storage; and
d) transport of dairy products.

(2) An operator whose processes are adequately covered by the HACCP application in this document can use this for developing their RMP. The relevant HACCP sections of this Code can be incorporated into the RMP by reference (i.e. by using the RMP Template for Cold and Dry Stores).

Guidance

Some store operators are also involved in the transport of products. This Code includes the transport of dairy products because this operation falls within the APA definition of dairy processor, which in turn is included in the definition of primary processor and all primary processors are required to have an RMP.

The transport of non-dairy products (e.g. meat, seafood, poultry, bee products) does not need to be covered by an RMP, but the operator must comply with the transportation requirements specified in Part 26 of the Animal Products Notice: Specifications for Products Intended for Human Consumption 2020. MPI intends to review these requirements and will consider harmonising them so that a consistent approach can be applied to the transport of all animal products.

7.1.6 HACCP application for products and processes not covered by this Code

(1) Carry out your own HACCP application if the one given in this document does not adequately cover your product or process (e.g. thawing). Use the HACCP approach and format in this Code as a guide or pattern for your own application.

(2) The HACCP application must be documented, and supported using information such as historical company records, technical publications or information provided by MPI [RMP Spec 9].

(3) The person(s) involved in this activity must have the appropriate knowledge and skills regarding the application of HACCP, the product and the process [RMP Spec 15 (1)].

(4) Prior to the application of HACCP principles to the process, all relevant GOP supporting systems should be documented.

Guidance

If the operator is involved in the chilling of products to the required preservation temperature, as specified in the HC Specs, they must carry out their own HACCP application for these processes. The requirements for the cooling of meat and meat products can be found in Industry Standard 6: Processing of Edible Product. The requirements for the cooling of certain seafood are specified in the HC Spec.

7.2 HACCP application

7.2.1 Scope

(1) The application of HACCP principles shown in this section applies to the following:

Type of premises	Stand-alone cold or dry stores whose primary operation is storage
Products	Various types of products, including meat, dairy, seafood, poultry, eggs, and bee products for human consumption, animal products for animal consumption, and industrial use
Process	From receipt of products into the cold or dry store to dispatch from the premises (and transport of a dairy products) Key processing operations:

	• blast freezing of products; • freezing of chilled products; • further chilling of products; • refrigerated storage (chilled or frozen) of products; • controlled atmosphere storage of products; • dry storage (storage under ambient conditions) of products; and • transport of dairy products.

7.2.2 Product descriptions

(1) Cold and dry stores handle a great variety of products, most of which are received already packed. A store operator is unlikely to know the characteristics and intended use of many of these products. It is, therefore, very difficult and impractical for a store operator to categorise these products into groups based on their product characteristics, process, or intended use and consumer.

(2) In this HACCP application, products have been broadly categorised into four groups based on the different legislative requirements that apply to these product groups. These categories are:

a) non-dairy animal products for human consumption;
b) dairy products for human consumption;
c) animal products for animal consumption; and
d) industrial use.

(3) Each product group can be further categorised, if needed, according to their storage requirements (e.g. chilled, frozen, stored in ambient conditions, etc.).

(4) A summary of the intended use and requirements for the four product categories is given in Table 10: Intended Use and Storage Requirements for Products.

Draft for Consultation

Table 10: Intended use and storage requirements for products

Products	Non-dairy animal products for human consumption	Dairy products for human consumption	Animal products for animal consumption	Industrial use
Intended consumer	Human consumption (general public)	Human consumption (general public)	Animal consumption	Not for human and/or animal consumption
Intended use of product that leaves RMP	• Further processing • Ready-to-eat	• Further processing • Ready-to-eat	• Further processing • Ready-to-eat	• Game trophies, souvenir • Rendering
Requirements for the chilling, freezing and storage of animal products	HC Spec 18.16 (2) specifies the following critical preservation temperatures: • Chilled mammals, ostriches, emus and poultry: ≤ 7°C • Frozen mammals, ostriches, emus and poultry: ≤ -12°C • Chilled whole fish: -1°C to 1°C • Chilled fish product: - 1°C to 4°C • Frozen fish or fish products (including shellfish): ≤ -18°C • Brine frozen fish: ≤ -9°C • Shucked pāua intended for canning in NZ: ≤ 6°C	DPC 4: Animal Products (Dairy): Approved Criteria for Storage and Transportation of Dairy Material and Products 6 (13) requires that stores have adequate facilities for storing refrigerated or frozen foods; monitoring food temperatures; and when necessary, controlling ambient temperatures to ensure the safety and suitability of food	AC Spec 8.8 (1) requires that chilling or freezing are conducted without any unnecessary delay and in a manner that minimises any potential microbial proliferation and contamination of animal material or product	As specified by the consignor or the operator
Labelling	Labelling of transportation outers as specified in HC Spec 8.3	DPC 4: Animal Products (Dairy): Approved Criteria for Storage and Transportation of Dairy Material and Products 9 (1) (c) requires that products are labelled in a manner that enables traceability to be maintained	Labelling of transportation outers as specified in AC Spec 4.5	As specified by the consignor or the operator

Draft for Consultation

7.2.3 Process description

(1) The process flows in Figures 2 and 3 show generic processes that are typically followed by New Zealand cold or dry stores.

Figure 2: Process flow for the chilling or freezing of products

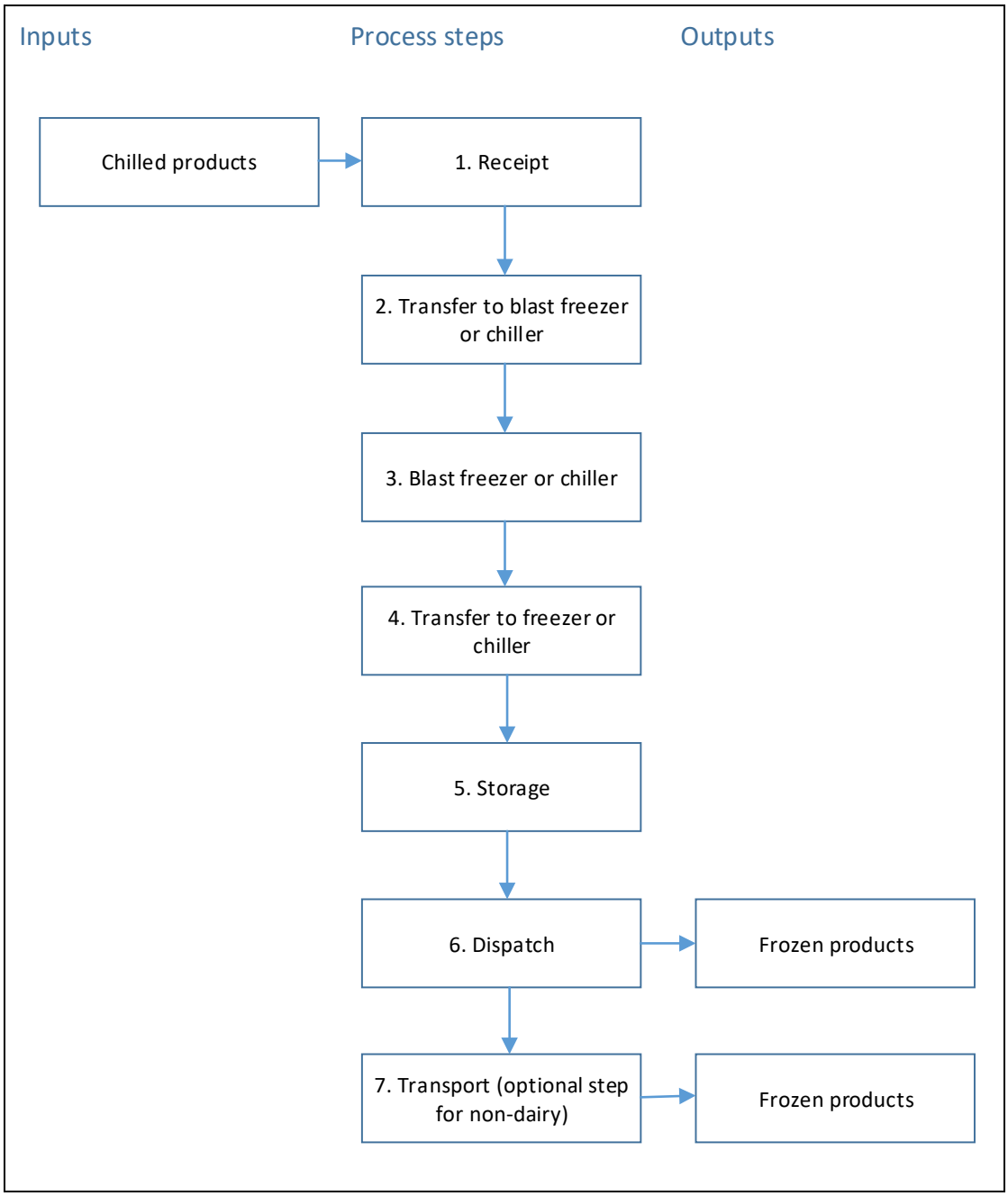
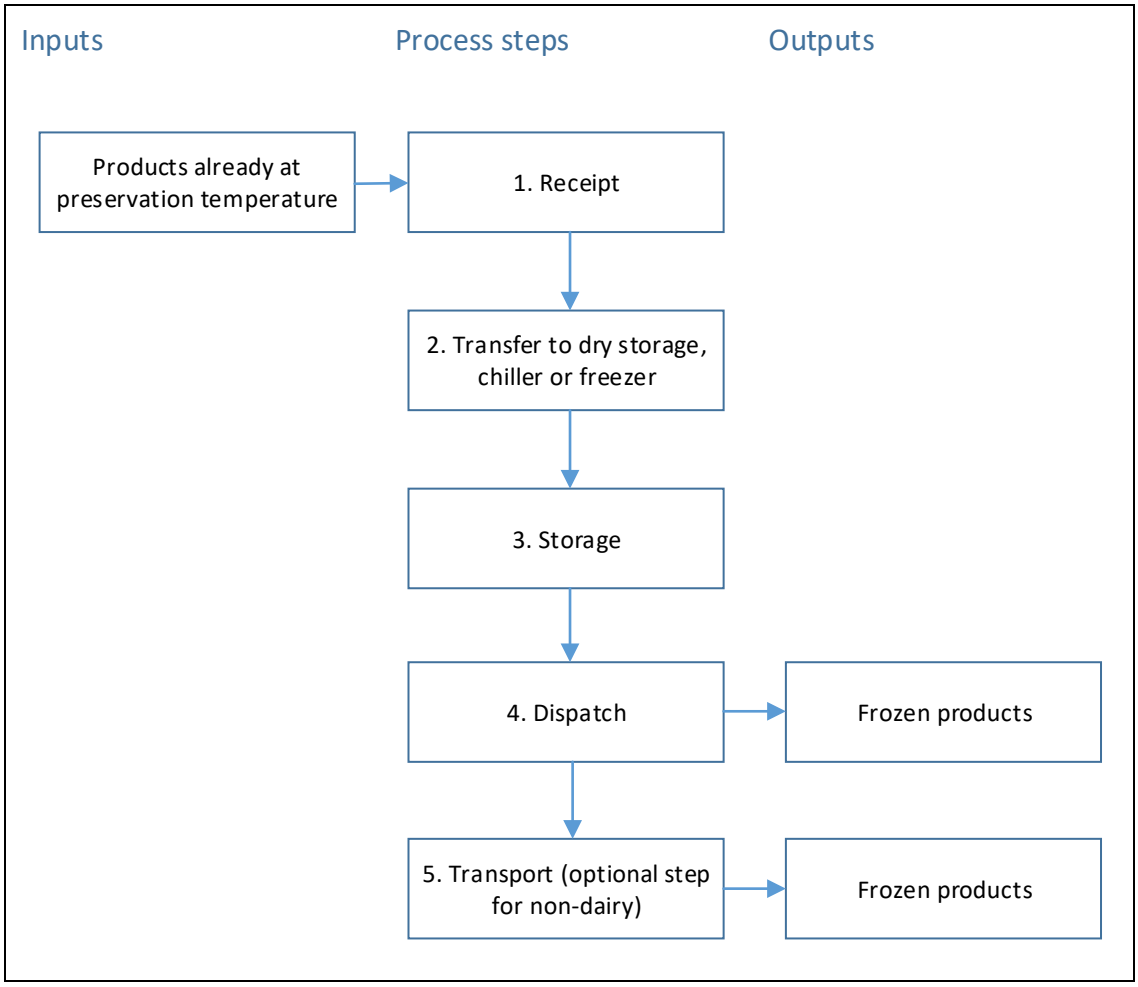


Figure 3: Process flow for the storage of products



7.2.4 Hazard analysis and CCP determination

7.2.4.1 Identification of hazards associated with incoming products

(1) For many of the products received at the premises, the store operator is unlikely to know their characteristics, including their composition, how they were processed and the hazards which are reasonably likely to occur in them. This, and the huge number of product types handled by the stores make it unreasonable to expect that specific hazard identification can be done for each type of product received.

(2) To simplify hazard identification, a conservative approach has been taken in this HACCP application. It is assumed that the products contain pathogenic microorganisms that are capable of growing to unacceptable levels if storage conditions (i.e. temperature, time, humidity, etc.) are not adequately controlled.

(3) It is also assumed, based on the results of national residue monitoring programmes that certain products will contain chemical hazards (e.g. chemical residues), but these are likely to be present within acceptable limits. Certain products may also contain physical hazards (e.g. metal, glass, etc.).

(4) Refrigerated or dry storage is unlikely to have any impact on any existing chemical or physical hazards in any products, particularly those that are received already packed and sealed. Therefore, only microbiological hazards will be considered further in the hazard analysis in the following section.

Consultation

7.2.4.2 Identification of process step hazards and CCP determination

(1) A simplified approach to hazard analysis and CCP determination is presented in Table 11: Hazard Analysis for Individual Process Steps, and CCP Determination. This differs from the usual approach used by MPI in published Generic HACCP applications or Generic RMPs for the processing of products. The usual approach involves a step-by-step analysis of the process, following the sequence of steps in the generic process flow. The analysis considers hazards from all inputs to the process, and it assesses the cumulative or sequential effects of the process steps on hazards. This approach was not considered as appropriate to the storage of products in cold or dry stores for reasons explained earlier.

(2) It has been considered more appropriate and practical to focus on identifying the impact of individual process steps on microbiological hazards which may occur in the products, and to determine the control measures which can be applied by the store operator.

(3) The different process steps that are commonly undertaken in cold or dry stores are listed in column 1 of Table 11: Hazard Analysis for Individual Process Steps, and CCP Determination. They are not presented sequentially for a particular process flow. Each process step was analysed to identify any potential impact on existing hazards (e.g. growth of existing microorganisms, etc.) and/or the potential for new hazards to be introduced or transferred to the product (e.g. contamination of damaged products, etc.). The potential impact of the different process steps are summarised in column 2.

(4) Column 3 gives the control measure(s) necessary for addressing each of the identified process step hazards. It was then determined whether or not the particular control measure was a Critical Control Point (CCP). A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. As shown in column 4, none of the control measures were identified as a CCP.

(5) Generally, freezing and refrigerated storage of products are considered as preservation steps. They are not intended to eliminate or reduce microbiological hazards to an acceptable level. Thus, they have not been identified as CCPs. The control of hazards at key steps is expected to be adequately addressed by GOP.

(6) Since no CCP has been identified, the other HACCP principles that relate to a CCP (i.e. identification of critical limits, CCP monitoring, CCP corrective action) have not been applied to the processes covered in this hazard analysis.

(7) Verification, documentation and record keeping for the GOP control measures will still need to be undertaken by the operator.

Draft for Consultation

Guidance

When freezing is applied for the purpose of eliminating a particular hazard, this step may be identified by the operator as a CCP. When a CCP is identified, the other HACCP principles that relate to a CCP (i.e. identification of critical limits, CCP monitoring, CCP corrective action) must be applied to the process.

Although freezing at -18°C for 24 h will inactivate the *Anisakid* parasite that may present in certain types of New Zealand fish, the primary purpose for freezing fish is to preserve it. The destruction of the parasite only occurs as a consequence of the preservation step. Fish can be sold chilled which indicates that the destruction of the parasite by freezing is not considered essential for food safety. Thus, the New Zealand seafood industry does not consider the freezing of fish as a CCP.

Freezing will destroy parasites, such as *Taenia saginata* and *Toxoplasma gondii* that may be present in certain types of red meat. The primary purpose for freezing meat is to preserve it. The destruction of the parasite only occurs as a consequence of the preservation step. Meat can be sold chilled which indicates that the destruction of the parasite by freezing is not considered essential for food safety. Thus, the New Zealand meat industry does not consider the freezing of meat as a CCP.

Comb honey and bee pollen are frozen to destroy wax moth and pollen mites. These organisms are not considered as hazards to human health. Thus, freezing of comb honey and bee pollen is not considered a CCP.

HACCP principles do not apply to non-food animal products as these are not for human and/or animal consumption, therefore, do not pose a food safety risk.

Table 11: Hazard analysis for individual process steps, and CCP determination

Process step	Potential impact of step on hazards	Control measure	Is the control measure a CCP?
Receipt	Microbiological growth in chilled products due to delays in refrigerating products	GOP - Procedures for receipt and timely transfer of products to refrigerated storage Refer to 6.2: Storage	No
		GOP - Training of personnel Refer to 2.2: Personnel Health and Hygiene and 2.3: Personnel Competencies and Training	No
Transfer and handling of products	Microbiological and physical contamination of products due to damage to packaging as a result of improper handling and/or forklift operation	GOP - Procedures for proper handling of products, and operation of forklifts and other conveyances Refer to 6.2: Storage	No
		GOP - Training of personnel Refer to 2.2: Personnel Health and Hygiene and 2.3: Personnel Competencies and Training	No
Blast chilling or freezing	Microbiological growth due to refrigeration failure, and/or non-compliance with established refrigeration parameters (e.g. loading capacity, etc.)	GOP- Proper design and construction of refrigeration facilities Refer to Part 3: Design, Construction and Maintenance of Buildings, Facilities and Equipment	No
		GOP – Refrigeration procedures Refer to 6.2: Storage	No
Chilled storage	Microbiological growth due to refrigeration failure, and/or non-compliance with established refrigeration parameters (e.g. loading capacity, temperature of incoming product, etc.)	GOP- Proper design and construction of refrigeration facilities. Refer to Part 3: Design, Construction and Maintenance of Buildings, Facilities and Equipment	No
		GOP – Refrigeration procedures Refer to 6.2: Storage	No
	Increase in microbiological levels above established limits due to non-compliance with agreed storage life	GOP - Procedures for ensuring agreed storage periods are met GOP - Inventory control Refer to 6.3: Traceability, Inventory and Labelling	No

Draft for Consultation

Process step	Potential impact of step on hazards	Control measure	Is the control measure a CCP?
Frozen storage	None		
Dry storage	Microbiological growth (e.g. moulds) due to increase in moisture content of dry products	GOP - Maintenance programme for facilities (e.g. leaking roofs, etc.) Refer to Part 3: Design, Construction and Maintenance of Buildings, Facilities and Equipment and Part 4: Repairs and Maintenance	No
		GOP - Procedures for handling and storage to prevent damage to packages, and protection of products from spillages or leaks Refer to 6.2: Storage	No
		GOP - Training of personnel Refer to 2.2: Personnel Health and Hygiene and 2.3: Personnel Competencies and Training	No
	Microbiological contamination from pests	GOP - Pest control procedures Refer to 6.6: Pest Control	No
Dispatch	Microbiological growth in refrigerated products due to prolonged periods under unrefrigerated conditions	GOP - Procedures for loading out of refrigerated products Refer to 6.2: Storage	No
Transport of products	Microbiological, chemical or physical contamination from an improperly cleaned container, vehicle or conveyance, or from other products that are transported at the same time	GOP – Cleaning and maintenance of containers, vehicles and other conveyances GOP – Separation of other products which may contaminate dairy products Refer to Part 5: Cleaning and Sanitation, 6.9: Transport and 6.10: Other Requirements Specific to Dairy	No
	Microbiological growth in refrigerated products due to refrigeration failure	GOP – Design and construction of refrigerated vehicles or conveyances GOP – Refrigeration procedures, and temperature control Refer to Part 3: Design, Construction and Maintenance of Buildings, Facilities and Equipment, 6.2: Storage, 6.9: Transport and 6.10: Other Requirements Specific to Dairy	No
	Microbiological and physical contamination of products due to	GOP - Procedures for proper handling of products, and	No

Draft for Consultation

Process step	Potential impact of step on hazards	Control measure	Is the control measure a CCP?
	damage to packaging as a result of improper handling and/or forklift operation	operation of forklifts and other conveyances. Refer to 6.2: Storage, 6.9: Transport and 6.10: Other Requirements Specific to Dairy	
	Increase in microbiological levels above established limits due to non-compliance with agreed storage life	GOP - Procedures for ensuring agreed storage periods are met GOP - Inventory control Refer to 6.3: Traceability, Inventory and Labelling	No

Draft for Consultation

Part 8: Identification and control of risk factors related to wholesomeness

8.1 Introduction

Guidance

Wholesomeness, means that the product does not contain or have attached to it, enclosed with it, or in contact with it, anything that is offensive, or whose presence would be unexpected or unusual in product of that description (e.g. foreign matter that are not food safety hazards, etc.).

(1) The operator must identify in their RMP any risk to the wholesomeness of the product that is reasonably likely to occur [RMP Spec 7 and 8].

(2) The operator must also document the control measures for effectively addressing any identified risk factor [RMP Spec 7 and 8].

(3) The control measures must be documented in supporting systems, including procedures for monitoring, corrective action and verification, and records [RMP Spec 7 and 8].

(4) The operator can develop the RMP where the products and processes are adequately covered by the risk factor identification in this Code. Copy of incorporate by reference into the RMP.

(5) Changes should be made to ensure that the risk factor identification accurately reflects the products and processes covered by the RMP.

(6) When the risk factor identification in this document does not adequately cover the product or process covered in the RMP, the operator should carry out their own risk factor identification. Use the approach and format shown here as a guide or pattern for the application.

Draft for Consultation

8.2 Identification and control of risks to wholesomeness

(1) Risk factors and controls related to wholesomeness of products are summarised in Table 12: Summary of Identified Risk Factors and Controls Related to Wholesomeness of Products.

Table 12: Summary of identified risk factors and controls related to wholesomeness of products

Risk factor	Control measures	Reference
Spoilt product	• Stock rotation • Temperature control	• Refer to 6.2: Storage
Pest contaminated products	• Pest control system	• Refer to 6.6: Pest Control

Schedule 1: Specification for suitable water supplied by the operator

1 Application

(1) This Schedule applies to each suitable water source that is supplied by an operator solely for the use of that operator at storage facilities. This Schedule does not apply to operators using an independent water supply such as a town supply.

2 Definitions

In this Schedule:

secure means the water has been assessed as secure using the Water Supply Assessment Checklist

not secure means the water has been assessed as not secure using the Water Supply Assessment Checklist

3 Initial assessment of water supply

(1) The operator must complete 1 Water Supply Assessment Checklist for each applicable water source used to supply water to the storage operation.

(2) If the water source is found to be not satisfactory, the operator must apply corrective actions, including treatment where necessary. The operator may choose to conduct the required water testing at any stage during the completion of the Water Supply Assessment Checklist. However, the operator must have evidence that the water source meets the criteria in Table 1: Quality of Suitable Water at the completion of the assessment process. For example, if initial tests indicate that the water is not satisfactory and corrective action is taken to ensure compliance, further testing will be required.

(3) If the Water Supply Assessment Checklist indicates that there may be a particular chemical hazard associated with a water supply, the operator must also arrange for chemical analyses to confirm that the water meets the relevant Maximum Acceptable Value (MAV) in the current edition of the Drinking-water Standards for New Zealand 2005 (revised 2018) (DWSNZ) issued by the Ministry of Health. If MAVs are exceeded, the operator must treat the water so that DWSNZ is complied with.

(4) The operator must keep the completed Water Supply Assessment Checklist and any associated records as part of the RMP.

Draft for Consultation

3 Reassessment of water supply

(1) The operator must reassess each applicable suitable water source that he or she supplies by completing the Water Supply Assessment Checklist:

a) at least once every 3 years;
b) prior to using a new operator source of suitable water (that is, the source changes or a new source is added); and
c) within 1 month of any changes to the environment in or around the water source that may affect the suitable water quality.

4 Ongoing water testing

(1) Each applicable suitable water source supplied by the operator must be subject to ongoing monitoring according to the following requirements:

a) suitable water must meet the criteria at the point of use set out in Table 1: Quality of Suitable Water according to the testing frequency set out in Table 2: Frequency of Ongoing Testing;
b) microbiological testing must be performed by a recognised laboratory with the required tests in the laboratory's scope of accreditation;

c) the operator must ensure that water samplers are trained; and
d) if chemical hazards are identified, the operator must arrange for relevant chemical analyses of the water and test for compliance with the relevant MAV in the Drinking-water Standards for New Zealand 2005 (revised 2018) (DWSNZ).

5 Expected corrective actions

(1) If the operator identifies that there is a problem with the suitable water source the following actions must be taken:

a) where possible remove the source of contamination;
b) if necessary, set up controls to prevent recontamination;
c) treat water, if the above controls do not completely fix the problem; and
d) confirm that the corrective action is effective through relevant microbiological and chemical testing.

Table 1: Quality of suitable water

Measurement	Criteria
E. coli or total coliforms	<1 per 100 ml
Turbidity	Should not routinely exceed 1 NTU, must not exceed 5 NTUs
pH (when chlorinated)	6.5 to 8
Chlorine (when chlorinated)	Not less than 0.2 mg/L (ppm) free available chlorine with a minimum contact time of 20 minutes

(2) Secure water sources are not required to be tested after the initial testing has been completed and which confirms compliance with Table 1: Quality of Suitable Water. All other water sources are subject to ongoing testing according to the frequency given in Table 2: Frequency of Ongoing Testing.

Table 2: Frequency of ongoing testing

Average daily water use	Microbiological testing	Turbidity testing	pH testing[1] (for chlorinated water)	Chlorine[1]
< 2,000 m^3/day	1 per month	1 per month	1 per month	Daily
2,000 - 10,000 m^3/day	1 per 2 weeks	1 per 2 weeks	1 per 2 weeks	Daily
> 10,000 m^3/day	1 per week	1 per week	1 per week	Daily

[1]Chlorine and pH testing applies if the water is chlorinated. Daily means every day when a premises has staff present and is operating.

Guidance

Drinking-water Standards for New Zealand 2005 (revised 2018) (DWSNZ) came into effect on 1 March 2019. This now requires routine monitoring of total coliforms and enumeration testing for *E. coli* and total coliforms for drinking water.

- The DWSNZ uses *E. coli* as the bacterial indicator, with a MAV of <1 per 100 ml.
- Faecal coliforms and total coliforms can be monitored in place of *E. coli* but any positive result is considered to be an *E. coli*. Faecal and total coliforms can be present when *E. coli* is not.
- Total coliform testing is very useful for bore water.
- Total coliforms with no *E. coli* could suggest a biofilm development.
- Aerobic plate count or standard plate count can be used as a measure of the effectiveness of any water treatment process.

Draft for Consultation