TQCSI HACCP CODE:2024 Food safety program -HACCP requirements





published by:

TQCS International Pty Ltd (ABN 59 065 953 924) Head Office: 117A Tapleys Hill Road HENDON SA 5014 AUSTRALIA ph: 61 8 8347 0603 freecall: 1800 686 739 email: info@tqcsi.com website: www.tqcsi.com

Preface

This **TQCSI HACCP Code:2024** is published by TQCS International Pty Ltd (TQCSI).

TQCSI is accredited by the Joint Accreditation System of Australia and New Zealand (JASANZ) and the US based ANSI National Accreditation Board (ANAB) as a third-party certification body for management systems. The **TQCSI HACCP Code** is a JASANZ registered Food Safety Management System Scheme. TQCSI's Food Safety Panel is a group of international food industry experts who participate in each review of the Code.

This **TQCSI HACCP Code:2024**, which is a revision of previous versions, has been specifically prepared for the food industry in response to growing demands by consumers for verification of the safety of the food and beverage they consume. The Code is aimed primarily at small businesses such as food producers, processors and manufacturers, distributors of food and beverage, restaurants, hotels and other food and beverage retail outlets. The Code can, similarly, be used by primary producers and businesses associated with the food industry such as packaging.

The **TQCSI HACCP Code** is a food industry standard to be used as a guide for businesses who are implementing a Food Safety Program, incorporating HACCP, anywhere in the world. The Code is not intended as a replacement for the ISO 22000 food safety management system standard or any other management system standard. Rather, it is based on ISO 22000 and is designed to fill a void for those smaller businesses who have no current requirement for ISO 22000 or who do not have the resources to implement and maintain it. However, as businesses grow, the Code is designed to facilitate transition to ISO 22000 certification.

The main feature of this **TQCSI HACCP Code** is its reference to Hazard Analysis Critical Control Point (HACCP), a proven hazard analysis method developed by the Codex Alimentarius Commission and used by food industries throughout the world to ensure food safety.

Food and beverage businesses who are certified to the **TQCSI HACCP Code** can demonstrate to their customers an ability to prepare safe food and beverage of a specified quality under a certified Food Safety Program, which is audited by an independent, third-party certification body. They also demonstrate the flexibility to confidently supply larger customers who require HACCP certification of their vendors. Appropriately certified businesses may exhibit the TQCSI HACCP certification mark, however use of the mark must not infer product certification (see TQCSI's Rules of Certification).

Reference to 'food' throughout this Code applies equally to 'food' and 'beverage'. The Code itself is represented by the bold type contained herein. To assist in its interpretation, explanations of the relevance of each element of the Code have been included in italics.

[©] Copyright - TQCS International Pty Ltd

Users of TQCSI Codes are reminded that copyright subsists in all TQCS International Pty Ltd publications or software. Except where the Copyright Act allows and except where provided for below no publications or software produced by TQCS International Pty Ltd may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from TQCS International Pty Ltd. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of TQCS International Pty Ltd.

Up to 10 percent of the technical content pages of Codes may be copied for use exclusively in-house by purchasers of the Code without payment of a royalty or advice to TQCS International Pty Ltd.

Inclusion of copyright material in computer software programs is also permitted without royalty payment provided such programs are used exclusively in-house by the creators of the programs. Care should be taken to ensure that material used is from the current edition of the Code and that it is updated whenever the Code is amended or revised. The number and date of the Code should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by TQCS International Pty Ltd at any time.

Contents

Preface			2
Co	Contents		
1.	Scope		4
2.	Refer	ences and Exclusions	4
3.	Defin	itions	4
Foc	od Safe	ty Program Requirements:	
4.	Management Commitment		
	4.1	Organisation & Responsibility	7
	4.2	Training	7
	4.3	Nonconforming Product and Correcting Problems	8
	4.4	Internal Audits	9
5.	НАССР		
	5.1	HACCP Team and Product Analysis	9
	5.2	Flow Diagram	10
	5.3	Analysis of Hazards and Control Measures	10
	5.4	Determination and Monitoring of Critical Limits	10
	5.5	Corrections & Corrective Action	
	5.6	Monitoring Records	12
	5.7	Verification	
6.	Food Safety Practices		
	6.1	Food Receipt	13
	6.2	Food Storage	
	6.3	Food Processing	
	6.4	Food Display	
	6.5	Food Packaging	
	6.6	Food Transport	
	6.7	Food Disposal	
7.	Quality Control		
	7.1	Procedures	14
	7.2	Good Hygiene Practices	
	7.3	Identification, Traceability & Labelling	
	7.4	Measuring Equipment	
	7.5	Purchasing	
	7.6	Food Recall	
8.	Documentation		
	8.1	Document Control	17
	8.2	Records	
	·		10
Ap	pendix	1 - Bibliography	19

1. Scope

This HACCP Code specifies food safety requirements for use by small businesses within the food and beverage industry to provide objective evidence of their capability to supply food or beverage which meets customer and legislative requirements.

Compliance to this Code is also dependent upon compliance with the relevant local food legislation or industry norms such as the relevant Food Standards Code.

The Code is aimed at achieving safety of food and beverage. It relies on the business identifying and documenting safety criteria. By applying the principles of HACCP, the hazards to food safety and poor quality are identified. Strategies can then be developed and implemented to eliminate food safety hazards.

Throughout this Code, when referring to food, it means food and beverage. Where specific tolerances are mentioned in this Code (eg temperatures), local legislation and industry norms are to be observed in lieu. Alternatively, other criteria may be used where the microbiological safety of food has been proven through scientific analysis.

2. References and Exclusions

This Code refers to the HACCP (Hazard Analysis Critical Control Point) method of identifying hazards to the safety of food. It is based on food safety practices and HACCP principles developed by the Codex Alimentarius Commission, as adopted by the World Health Organisation.

While the principles of Codex Alimentarius refer to 'Critical Control Points', this Code encourages businesses to address all 'Control Points' relevant to the safety of food. Good Hygiene Practices (often referred to as pre-requisite programs) should be established, implemented, maintained and verified to facilitate the successful implementation of the HACCP-based Food Safety Program (also known as a HACCP System).

In implementing a Food Safety Program to comply with this Code, the respective business must ensure it is also complying with all relevant legislative or statutory requirements, industry accepted norms and, where applicable, the relevant Food Standards Code.

Where a particular clause of Section 6 to this Code (Food Safety Practices) does not relate to the activities of the business, it may be excluded from the business' food safety program providing verification for its omission is justified. However, all other sections of the Code must be addressed and described in the respective food safety program.

3. Definitions

For the purposes of this Code, the following definitions apply:

- Acceptable level a level of hazard in a food at or below which the food is considered to be safe according to its intended use.
- Allergen cross-contact the unintentional incorporation of an allergenic food, or ingredient, into another food that is not intended to contain that allergenic food or ingredient.

• Cleaning - the removal of soil, food residues, dirt, grease, or other objectionable matter.

- 5 -

- Competent authority the government authority or official body authorised by the government that is responsible for the setting of regulatory food safety requirements and/or for the organization of official controls including enforcement.
- Contaminant any biological, chemical or physical agent, foreign matter or other substances not intentionally added to food that may compromise food safety or suitability.
- Contamination the introduction or occurrence of a contaminant in the food or food environment.
- Control the state wherein correct processes and/or procedures are being followed and any established criteria are being met to take all necessary actions to ensure and maintain compliance with established criteria and procedures.
- Control measure any action or activity that can be used to prevent or eliminate a hazard or reduce it to an acceptable level
- Control point the step in the process where control measures are applied to prevent a food safety hazard.
- Correction action taken to eliminate a food safety hazard, also referred to as 'immediate action'.
- Corrective action action taken to eliminate the cause of a food safety hazard and prevent recurrence.
- Critical Control Point a step at which a control measure or control measures, essential to control a significant hazard, is/are applied in a HACCP system.
- Critical limit a criterion, observable or measurable, relating to a control measure at a CCP which separates acceptability from unacceptability of the food.
- Deviation failure to meet a critical limit or to follow a GHP procedure.
- Disinfection reduction by means of biological or chemical agents and/or physical methods in the number of viable microorganisms on surfaces, in water or in air to a level that does not compromise food safety and/or suitability.
- Flow diagram a systematic representation of the sequence of steps used in the production or manufacture of food (also commonly referred to as flow chart).
- Food: edible food or beverage which is fit for human consumption.
- Food handler any person who directly handles packaged or unpackaged food, equipment and utensils used for food, or surfaces that come into contact with food and that is expected, therefore, to comply with food hygiene requirements.
- Food hygiene all conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain.
- Food safety assurance that food will not cause adverse health effects to the consumer when it is prepared and/or eaten according to its intended use.
- Food Safety Program the development of a HACCP Plan and the implementation of processes and procedures in accordance with that plan (sometimes referred to as a HACCP System).
- Good Agricultural Practice (GAP) practice followed by the primary sector to ensure control of processes and a safe working environment.

- Good Hygiene Practice (GHP) fundamental measures and conditions applied at any step within the food chain to provide safe and suitable food.
- Good Manufacturing Practice (GMP) practice followed by manufacturers and other businesses to ensure the control of processes and a safe working environment.
- HACCP Hazard Analysis Critical Control Point.
- HACCP Plan documentation or set of documents, prepared in accordance with the principles of HACCP, to ensure control of significant hazards in the food business.
- HACCP Studies the HACCP Plans, process lines or differing hazard analysis for a Company's product range. It is common for one HACCP Plan to incorporate any number of different HACCP Studies (eg by using an Excel spreadsheet). Often the HACCP Studies can manifest in different Flow Diagrams.
- HACCP System the development of a HACCP plan and implementation of processes and procedures in accordance with that plan (more correctly referred to as a Food Safety Program).
- Hazard a biological, chemical or physical agent in food with the potential to cause an adverse health effect.
- Hazard analysis the process of collecting and evaluating information on hazards identified in raw materials and other ingredients, the environment, in the process or in the food, and conditions leading to their presence to decide whether or not these are significant hazards.
- Monitor the act of conducting a planned sequence of observations or measurements of control parameters to assess whether a control measure is under control.
- Nonconforming product raw material or other product that does not meet business requirements or specifications.
- Potentially Hazardous Food (PHF) food that must be kept at a certain temperature to minimise pathogenic growth or prevent the formation of toxins in the food.
- Preventive measure action to prevent a food safety hazard occurring.
- Significant hazard a hazard identified by a hazard analysis as reasonably likely to occur at an unacceptable level in the absence of control, and for which control is essential given the intended use of the food.
- Step a point, procedure, operation, or stage in the food chain, including raw materials, from primary production to final consumption
- Temperature control to maintain food within a temperature range which ensures the microbiological safety of product, ie frozen foods remain frozen (normally -15°C to 18°C), cold foods below 5°C and hot foods above 60°C respectively, unless local regulations apply or the microbiological safety of food can otherwise be proven.
- Validation of control measures obtaining evidence that a control measure or combination of control measures, if properly implemented, is capable of controlling the hazard to a specified outcome.
- Verification the application of methods, procedures, tests, and other evaluations, in addition to monitoring, to determine whether a control measure is or has been operating as intended.

Food Safety Program Requirements

- 4 Management Commitment
- 4.1 Organisation & Responsibility

The business must establish, document, implement and maintain a Food Safety Program, incorporating suitably verified HACCP Plans.

A HACCP Plan is required for each group of products or process lines which cannot adequately be covered by a single HACCP Plan.

The organisational structure must be documented to describe who has functional responsibility for food safety and the interrelation and reporting lines between management and staff. A description of tasks required of staff must be documented, including those relevant to food safety, and management must ensure roles, responsibilities and authorities are clearly understood by staff. Moreover, a food safety culture should be encouraged so staff are invested in the system.

Management must ensure that all relevant regulatory requirements are complied with.

Explanation: Appropriate documentation must be implemented to support the HACCP Plan. Typically, this is in the form of a manual with supporting procedures and forms. Management should ensure the integrity of the system is maintained when changes are planned and implemented.

A HACCP Plan is required for similar groups of products, processes or process lines. A number of Flow Diagrams may be relevant to the one HACCP Plan. Multiple HACCP Plans are required when the processes are completely different (eg meat processing, catering, bakery, etc).

A common failure of small business is the absence of any formalised reporting and responsibility structure. In many instances, staff are uncertain as to their particular function within the business. It is therefore necessary to develop an organisation chart showing the relative responsibilities and, in particular, nominating those aspects where specific responsibility for food safety has been designated.

A brief description of each position's duties, responsibilities and authorities is required. It may be in the form of a Job Description or Contract of Employment.

Management must ensure promotion of a food safety culture. Key elements of a strong food safety culture include commitment, staff engagement, clear communication channels, training and awareness, and availability of resources.

Management must periodically review its operations to ensure all legislative and regulatory requirements are complied with.

4.2 Training

Management must provide appropriate training and supervision for staff to ensure they are equipped to perform their tasks, including training in all critical control points and any other relevant documented procedures. Copies of relevant certificates issued by external training organisations proving a person's competence must also be retained by the business, where appropriate.

All staff involved in the handling of food must be competent in food hygiene and safety. Similarly, they must understand their personal obligations for hygienic handling of food and records of such training must be retained.

Staff must also be trained in their responsibilities regarding notifying their supervisors when ill.

Staff must also be appropriately trained in handling chemicals to prevent contamination of food, where relevant.

Induction training for new staff must include food handling training where prior appropriate training cannot be demonstrated.

Explanation: All staff must be adequately trained to perform the function for which they are employed. To enable this to be identified and planned, it is necessary to maintain sufficient records which show the qualifications, skills and training performed by each member of the business.

This is particularly so in respect to those persons who handle, organise or control the preparation, processing and movement of food.

Management must be confident that relevant staff are competent in food hygiene and safety. Ongoing training is necessary for all levels of staff, including managers, as appropriate to the business.

Staff must be made aware of their individual responsibilities to report any illness they may be suffering which may affect the safety of food. Similarly, during the induction process, staff must undergo food handling training unless prior training is sufficient. Elements such as training programs, the extent of training required, instruction, supervision and refresher training should be considered.

4.3 Nonconforming Product and Correcting Problems

The business must establish and maintain documented procedures to ensure product which does not conform to specified requirements is prevented from unintended use and to ensure customer complaints are identified and appropriately addressed.

The business must have a documented procedure for identifying the cause of significant problems affecting food safety which are found either in the raw material or during preparation, storage, sale or delivery. Appropriate action must then be taken to reduce the likelihood of the problem occurring again.

Explanation: When things go wrong, it is important to analyse the more serious nonconformances to prevent them occurring again. Staff must be encouraged to bring these problems to the attention of management without fear of retribution.

When material or product is found to be nonconforming (eg out of date, contaminated, stale, unsightly, etc) it must be labelled and quarantined in an area known to all staff such that will prevent unintended use. Alternatively, it may be immediately discarded, however whatever action is taken, care must be exercised to ensure there is no cross-contamination with other product.

Nonconformances (or 'problems') occur from many aspects of business including as a result of customer complaints (internal and external customers), raw material received from suppliers, product or service failure during preparation, final product or service delivery and measuring equipment inaccuracies. They may, in fact, be suggestions for improvement made by staff or customers. Nonconformances may be logged in some manner that allows management to review them from time to time to identify trends (eg a diary, notebook or some other register).

Following the identification of significant nonconformances or repeating (trending) nonconformances identified through customer complaints, etc, it is essential to conduct an analysis of those nonconformances which will enable continual improvement and prevent a recurrence. This action is called corrective action and requires a determination of the root cause of the problem.

While documentary evidence of corrective action is not mandatory, the business must be justifiably confident that appropriate action has been taken.

4.4 Internal Audits

The business must conduct internal audits to verify that activities comply with documented requirements and to determine the effectiveness of the Food Safety Program. Action must be taken to correct any deficiencies found.

Explanation: It is necessary to ensure that the Food Safety Program designed and implemented in a business continues to operate as intended. This Program is normally documented in the form of a HACCP Manual, HACCP Plans and procedures. Therefore, regular internal audits must be conducted (at least 12 monthly), ensuring that what is said to be done (documented instructions) is actually being done.

Where it is identified that activities are occurring at variance to the documented methods, they must be identified and corrective action initiated.

5 HACCP

5.1 HACCP Team and Product Analysis

A suitably trained and experienced HACCP Team must be established to develop, implement and maintain the HACCP Plans.

In preparation of the HACCP Plans, the HACCP Team must analyse the products relevant to the business, including the scope of operations. The intended use of the product by the end user or consumer must be identified considering vulnerable groups, where applicable.

A product description must be documented, identifying the product's composition (ingredients, allergens etc), physical/chemical/microbiological characteristics, processing methods/technologies, packaging, shelf life, storage conditions, usage instructions, intended consumer groups and method of distribution.

Explanation: The HACCP Plans developed will only be as good as the information considered in developing the Plans. Appropriate staff with relevant qualifications and experience should be selected to comprise the HACCP Team. Even if using the services of an external specialist, it is necessary to involve the HACCP Team for particular knowledge of the products and processes.

The first role of the HACCP Team is to determine the scope of the HACCP Plan and analyse the types of products and processes to be covered.

Product descriptions are required for each type of product manufactured, stored or otherwise handled. Any limits relevant to the food product already established for hazards should be considered and accounted for in the HACCP Plan (eg limits for food additives, regulatory microbiological criteria, maximum allowed veterinary medicines residues, and times and temperatures for heat treatments prescribed by competent authorities).

Potential food safety hazards as a result of the misuse or unintended use of products must also be considered.

5.2 Flow Diagram

Each process step within the business' operations that might attract hazards to the safety of food must be identified in a flow diagram.

The flow diagram must be validated by the HACCP Team to ensure all relevant process steps have been identified.

Explanation: The flow diagram (or flow chart) must identify those steps which have unique hazards within each process. The use of standard symbology is encouraged.

Flow diagrams should, as appropriate, include but not be limited to the sequence and interaction of the steps in the operation, where raw materials, ingredients, processing aids, packaging materials, utilities and intermediate products enter the flow, any outsourced processes, where applicable, reworking and recycling take place, and where end products, intermediate products, waste, and by-products are released or removed.

The HACCP Team must walk through the flow chart to confirm its accuracy prior to identifying hazards in each step.

5.3 Analysis of Hazards and Control Measures

The business must identify those hazards to the safety of food which may reasonably be expected without the presence of any control measure.

Control measures must then be identified to limit those hazards arising for each Control Point.

Those hazards are to then be risk assessed to identify if they should be considered Critical Control Points.

Explanation: Each hazard to the safety of food, which may reasonably be expected to occur if a control measure was not in place, should be identified. Once identified, the potential risk and severity of that hazard should be determined.

Control measures should then be identified for each hazard. These control measures should not include monitoring, rather they should prevent potential hazards occurring in the first place through training, maintenance of equipment or other standard practices.

Management should ensure and verify that control measures are effectively implemented and practiced, and that the related documentation is up to date.

Those Control Points or steps in the process which represent a serious risk to the safety of food is to be identified as a Critical Control Point. Determination of Critical Control Points must be verifiable and this is often best achieved by the use of a 'decision tree' process or through an experienced HACCP Team.

5.4 Determination and Monitoring of Critical Limits

Critical Limits must be established for each Critical Control Point. Those critical limits should be validated against scientific evidence, legislative and regulatory requirements.

A means of monitoring those critical limits must be established to ensure the business is aware if they are exceeded.

Explanation: Setting critical limits for each Control Point is vital if the process is to be effectively monitored. Critical limits should be, as far as is possible, objective not subjective (ie "temperatures between 1 and 5° C" is easier to monitor than "temperature correct"). Where an objective limit is not possible to determine, the subjective test must be as clear as possible and not open to varying interpretations (ie "bench clean and shiny appearance without any physical contamination or inappropriate odour" is better than "bench clean").

Critical limits could be based on existing literature, regulations or guidance from competent authorities, or studies carried out by a third party.

As an aid in developing specific training to support HACCP Plans, work instructions and procedures should be developed which define the tasks of those in charge of each CCP.

Once the critical limit is established, a means of monitoring that limit is to be determined and documented. Monitoring should be of the critical limit and not of the preventive measure. Staff who normally perform the operational process are often best placed to monitor the critical limits. All monitoring records and associated documents should be signed by the person performing the monitoring. Results and timings of the performed activity should also be reported.

Monitoring of critical limits should be continuous. If monitoring is not continuous, the frequency of monitoring should be sufficient to ensure to the extent possible the critical limit has been met and limit the amount of product impacted by deviation.

Monitoring of CCPs should ensure timely detection of any deviation from the critical limit to allow timely isolation of the affected product.

5.5 Corrections & Corrective Action

The business must determine the correction (immediate action) to take in response to critical limits being exceeded in order to mitigate unsafe food being consumed. The business must also then take corrective action to address the cause of the critical limit being exceeded to prevent a recurrence.

Explanation: If critical limits are exceeded, it is important to empower staff sufficiently to allow them to properly and effectively address the problem. This is the most important part of the HACCP Plan and the reason why HACCP Plans should be available for staff to use and react to. Specific written corrections and corrective actions should be developed for each CCP, and it should ensure that the CCP is brought under control and potentially unsafe food is handled appropriately.

As far as is possible, corrections or immediate action should be taken by the staff responsible for monitoring the critical limit.

Similarly, if a critical limit has been exceeded, the relevant control measure has obviously failed and management should review the control measure – this is normally described as corrective action.

Supervisory staff responsible for the control measure of each Control Point should normally be responsible for taking corrective action.

Details of the corrective actions, including cause of the deviation and product disposition procedures, should be documented in the HACCP records.

5.6 Monitoring Records

Records must be maintained for the monitoring of critical limits relevant to any Critical Control Point.

Records must also be maintained of corrections and corrective action taken when critical limits are exceeded.

Explanation: Objective evidence of the monitoring of critical limits is required whenever those hazards are considered to be Critical Control Points. Records may also be retained for other Control Points.

These records must be verified by management at such regularity which ensures that if critical limits are exceeded, appropriate corrective action can be taken to prevent contamination or unsafe food being consumed.

Records must be retained for a period in which the monitoring may reasonably be questioned by appropriate authorities.

5.7 Verification

Verification of the HACCP Plan must be conducted to ensure the business is confident that the safety of food is assured and any relevant product specifications are being complied with.

Such verification must include a regular review of records, appropriate and responsible microbiological or chemical testing of food, and appropriate review of the HACCP Plans at regular intervals.

Explanation: Verification of the HACCP Plan is vital to ensure its ongoing relevance.

The Food Safety Program should be reviewed periodically and whenever there is a significant change that could impact the potential hazards and/or the control measures (eg new processes, new ingredients, new products, new equipment).

Periodic review should also be conducted when the hazard analysis has determined that there are no CCPs, in order to assess whether the need for CCPs has changed. Management must maintain the integrity of the Food Safety Program when changes are planned and implemented.

A separate form is normally maintained which lists the various means of verifying the HACCP Plan.

Such verification must also include microbiological tests of foods (and chemical tests where relevant) at intervals which will give reasonable confidence that the food processes used in the business is ensuring safe food for the customer and that any product specifications are being met.

Similarly, microbiological testing must verify use by or best before dates which are determined by the business. The results of testing must be analysed and understood by management and, if applicable, any breaches of critical limits must be investigated. Where the laboratory reports are not understood, management must take appropriate steps to understand them.

Verification records, including laboratory reports of any testing conducted, must be retained for an appropriate period.

Verification of the implementation of control measures should be conducted with sufficient frequency to ensure the HACCP Plan is being implemented properly.

6 Food Safety Practices

6.1 Food Receipt

The business must ensure that any raw materials or other food received is protected from the likelihood of contamination.

The business must maintain records of all suppliers of any raw material or other food received.

Potentially hazardous food must be received under temperature control.

Explanation: Food is, all too often, contaminated or spoilt at the time of delivery. Each business must ensure food is delivered in an appropriate, safe condition. Particularly, frozen food must be received frozen hard and potentially hazardous food must be received within temperature control.

Each business is required to have a temperature measuring device to be able to record the temperature of potentially hazardous food received. Normally this will need to be a probe thermometer.

6.2 Food Storage

Food in storage must be protected from the likelihood of contamination and potentially hazardous food must be maintained under temperature control.

Explanation: Potentially hazardous food must be stored as soon as possible after receipt to ensure it remains in temperature control. All food must be stored in such a manner that prevents contamination, particularly from pest infestation and contamination from unclean storage areas.

6.3 Food Processing

Appropriate action must be taken to prevent the likelihood of contamination during food production.

Environmental conditions must ensure food is not contaminated during processing and, as far as possible, deny pathogenic growth.

When cooling cooked food, businesses are to ensure the food cools:

- from 60°C to 21°C within two hours, and
- from 21°C to 5°C within a further four hours,

unless local legislation or industry norms apply, or the business can otherwise demonstrate the safety of the food.

Food being reheated must be rapidly heated above 60°C unless local legislation or industry norms apply, or the business can otherwise demonstrate the safety of the food.

Explanation: The onus is on the business to ensure they process safe food. Where a process step is needed to reduce pathogens to a safe level, the business must use a process which is reasonably accepted as being able to achieve microbiological safety.

Cooling of foods following cooking, particularly wet meat dishes and sauces, must be achieved in the

nominated time frame to prevent uncontrolled pathogenic growth. Regrettably, in hot climates this is often difficult to achieve and the business must prove through microbiological testing that their process for cooling food is safe. In such cases, cooling periods must be nominated and be as close as possible to those described above. Relevant test results must be retained as evidence.

Similarly, reheating food must ensure the food reaches a temperature greater than 60 $^{\circ}$ C.

6.4 Food Display

All measures must be taken to prevent contamination of food on display.

Potentially hazardous food must be displayed under temperature control.

Explanation: Specific rules apply for displaying unpackaged, ready to eat food for self service. Ready to eat food that is not intended for self service must not be displayed unless it is wrapped.

6.5 Food Packaging

Any packaging process, including the materials used for packaging, must prevent contamination of food.

Explanation: The business must ensure the packaging material and the method of packaging does not contaminate or cause spoilage of food.

6.6 Food Transport

All food must be protected from the likelihood of contamination during transport. Potentially hazardous food must be transported under temperature control unless critical limits can be assured.

Explanation: The business must effectively ensure potentially hazardous food is transported in a clean, refrigerated vehicle. Transportation of all food should be in a covered vehicle.

Transport vehicles should be kept in an appropriate state of cleanliness, repair and condition.

6.7 Food Disposal

Food being disposed of must be kept separate from other food.

Explanation: Food being disposed of must be separated and readily identifiable. Unwrapped food may not be re-sold to other customers. Refrozen potentially hazardous food may not be sold unless it was thawed and refrozen for the purposes of processing.

7 Quality Control

7.1 **Procedures**

The business must establish and maintain documented procedures to ensure the appropriate control of Critical Control Points.

Explanation: Procedures or checklists must be maintained for those steps considered Critical Control Points. Businesses are encouraged to also maintain them for other Control Points.

These procedures or checklists are to be readily available for staff to refer to, as and when required.

7.2 Good Hygiene Practices

The business must establish and maintain documented procedures to ensure good hygiene practices (GHP) are observed. Documented procedures should also be considered for control points which have not resulted in a critical control point being applied but would improve the safety of food.

GHPs must be monitored at regular intervals and verified for their effectiveness.

Particularly, the business must ensure the premises are maintained in a clean and sanitary condition and that food contact areas and utensils are sanitised before use, where applicable.

Good manufacturing practices (GMP) and good agricultural practices (GAP) in the agricultural sector may satisfy the requirements for GHP. Irrespective of the terminology used, procedures must be developed to ensure processes are routinely and uniformly undertaken to ensure the safety of food where a potential food safety hazard has been identified.

Explanation: The principles of GHP are a sound basis for the realization of food safety. The guidance of the local food safety standards/regulations must be observed to prevent the contamination of food.

Key aspects of GHPs include time and temperature control, process steps that contribute to the safety of food, microbiological, physical, chemical and allergen specifications, prevention of microbiological, physical and chemical contamination, allergen management, incoming materials and packaging. Some of these aspects could be considered as control measures applied at CCPs in the HACCP Plan.

GHP is to include, where relevant, location establishment, upkeep of the facilities, pest control, waste control, utilities, use of protective clothing, cleaning and sanitisation of equipment including maintenance, and the selection and use of chemicals, where appropriate.

Cleaning, disinfection, and maintenance procedures should be reviewed regularly and adapted to reflect any changes in circumstances. Environmental swabbing or other monitoring of surface areas and equipment is encouraged to verify that the cleaning processes in place are effective.

Similarly, the business and employees must be aware of their responsibilities for safe food handling. These include, but are not limited to, personal hygiene, health status, illness and injuries, personal cleanliness, behaviour and external visitors. Appropriate procedures and practices must be developed to ensure these issues are implemented and monitored in each business. The frequency of monitoring should be appropriate to ensure consistent process control. Records of monitoring should be available.

While HACCP used the term GMP in lieu of GHP for many years, GMP now more commonly refers to formally documented GMP for specific industries (eg ISO/TS 22002-1:2009, Food manufacturing).

Similarly, GAP is commonly used in the agricultural sector and includes, where relevant, potential sources of contamination from the environment (eg pollutants), effects of primary production activities on food safety (eg faecal contamination, plant/animal diseases), agricultural and veterinary chemical selection, handling, application, storage and disposal.

7.3 Identification, Traceability & Labelling

The business must be able to identify from where raw materials and food was purchased. Product must also be traceable to the supplier so that recalls or other investigation can be readily facilitated, if required. Product must be clearly identified during and following production.

Procedures must be documented on how identification and traceability is addressed within the business.

Labelling must comply with all legislative and regulatory requirements.

Explanation: Where possible and critical to the safety of food, product must be identified upon receipt and this identification must remain during processing and dispatch activities.

Essential elements such as lot identification, product information, product labelling and consumer education should be considered.

This will provide traceability of product to the supplier in the event of a safety problem being identified.

Following dispatch from the premises, suitable records should be maintained, where practical, to provide for the traceability and identification of that product to the original supplier.

Where legislative or regulatory requirements apply for labelling, those requirements must be fully complied with. This is particularly important for genetically modified foods or allergens which must be declared.

7.4 Measuring Equipment

All measuring equipment which is used to measure food or food processes relevant to a control point or critical control point must be regularly calibrated or checked to an accuracy appropriate to its use.

Explanation: Most businesses use equipment to measure the conformance to specification of the product being provided. This equipment may, at times, develop an error and provide inaccurate measurement and/or data, which may result in nonconforming product being supplied to the customer. Such equipment must be identified and regularly calibrated or checked in a manner that ensures its continued accuracy.

This calibration/checking activity must be conducted using methods that are traceable to nationally recognised standards or are otherwise confidently accurate. Records of respective equipment and calibration/checking activity must be maintained, describing actual calibration or checking results and error adjustments made, if required.

7.5 Purchasing

The business must provide clear and concise requirements when purchasing product which affects the safety of food.

Only those preservatives, processing aids or additives that have been approved for use by the relevant legislative authority may be used. They may only be used for the purpose for which they were approved.

The business must select suppliers on the basis of their ability to meet contractual requirements, including any specific quality assurance or food safety requirements.

Explanation: Safety of food usually begins with the product provided by the supplier. Therefore, the eventual safety of food provided to a customer is directly dependent upon the original supply of the raw material, etc. It is essential that suppliers are advised of exactly what is required to be provided.

All purchasing documents relevant to food safety should contain information that can be clearly understood and interpreted by the supplier.

In some instances, it is not practical that this information is provided in hard copy to the supplier. In these situations, records should be maintained in-house regarding the orders that have been placed and the product received in response to those orders.

It is essential to build customer confidence in the business' operation, particularly in relation to food protection and in the use of approved additives, chemicals and preservatives. It is also essential that proof of this use in accordance with manufacturer recommendations is available, where applicable.

The business is to conduct an initial evaluation of suppliers that are to be used to provide product for inclusion in the business' food. This evaluation must result in a list of approved or preferred suppliers and this list must be reviewed from time to time to include or reject new suppliers and/or those who are not performing. This evaluation process should also consider the ability to trace product through appropriate labelling requirements (ie presence of prescribed allergens or genetically modified ingredients). The list must be made available to staff responsible for ordering goods.

7.6 Food Recall

The business must have documented procedures in place to ensure food can be identified and quarantined if recalled by a supplier and to recall food once distributed if it is found not to be safe.

Explanation: Food Recall applies equally to primary producers, manufacturers, distributors and retailers. The relevant Food Industry Recall Protocol should be used as the basis for all food recall.

Businesses should also ensure they have procedures to deal with the recall of raw product or food by the relevant supplier – this is particularly relevant to distributors and retailers. Reporting to the relevant competent authority should be required and public warnings considered where a product may have reached consumers and return to business or removal from market is appropriate.

8 Documentation

8.1 Document Control

The business must ensure a procedure is in place for the control of documentation relevant to food safety.

Explanation: Maintaining appropriate documents relevant to the running of a business is a sound management practice that must be encouraged. Moreover, third party certification will be based on documentary evidence that the HACCP Plan is being followed.

Typical documentation includes but is not limited to HACCP Team composition, hazard analysis, CCP determination, critical limit determination, validation of control measures and critical limit and amendments made to the HACCP Plans.

In order to ensure that staff are using current documentation that instructs and/or details the manner of performing work, it is important to ensure that superseded documentation cannot be used.

As businesses move to computerised documentation, the same philosophy must apply to ensure only the current, approved method of conducting business is available to staff.

8.2 Records

Records relating to food safety must be maintained to demonstrate that the food preparation processes and essential monitoring or tests that have been identified in the HACCP Plan have been completed.

Records must be retained for sufficient time to ensure the thorough investigation of any food safety related problem that might occur.

Explanation: Records must be retained in an orderly and controlled fashion to prove the safety of food. This proof may be required by auditors to ensure that processes have been carried out as planned, or alternatively, may be a means of identification and traceability. It is, therefore, necessary to maintain records in a clear, concise and easy to use manner.

Examples of records include CCP monitoring activities, deviations and associated corrective actions, and HACCP verification.

Appropriate records should be retained for a period that exceeds the shelf-life of the product or as determined by the competent authority.

Appendix 1 (informative)

Bibliography

- [1] ISO 9001:2015, Quality management systems Requirements.
- [2] ISO 22000:2018, Food safety management systems Requirements for any organization in the food chain.
- [3] Codex Alimentarius Commission, General principles of food hygiene, No. CXC 1-1969 (amended 2022, published 2023).
- [4] FSANZ Food Standards Code, Food Safety Standards: 3.1.1 (Interpretation and Application), 3.2.1 (Food Safety Programs), 3.2.2 (Food Safety Practices and General Requirements), 3.2.3 (Food Premises and Equipment).