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The HACCP Advantage | Program Manual

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The HACCP Advantage

Program Manual

blank page

Table of Contents

Introduction	1
The <i>HACCP Advantage</i> Prerequisite Program Standards	5
TABLE 1 Prerequisite Program Standards Summary Chart	6
<u>CONTROL PROGRAMS</u>	
P1 Good Manufacturing Practices	
P1.1 Good Manufacturing Practices Program	11
P2 Shipping, Receiving, and Storage	
P2.1 Shipping, Receiving and Storage Program	12
P3 Sanitation	
P3.1 Sanitation Program	13
P4 Equipment Maintenance	
P4.1 Preventive Maintenance and Calibration Program	14
P5 Pest Control	
P5.1 Pest Control Program	15
P6 Recall	
P6.1 Recall Program	16
P7 Water Safety	
P7.1 Water Treatment Program	17
P7.2 Water Safety Monitoring Program	18
<u>TRAINING</u>	
T1 Good Manufacturing Practices	
T1.1 Good Manufacturing Practices Training	21
T2 Shipping, Receiving and Storage	
T2.1 Shipping, Receiving and Storage Training	22
T3 Sanitation	
T3.1 Sanitation Training	23
T4 Equipment Maintenance	
T4.1 Preventive Maintenance and Calibration Training	24
T5 Pest Control	
T5.1 Pest Control Training	25
T6 Recall	
T6.1 Recall Training	26
T7 Water Safety	
T7.1 Water Treatment Training	27
T7.2 Water Safety Monitoring Training	28
T8 Critical Control Point	
T8.1 Critical Control Point Training	29
T9 Process Technology	
T9.1 Equipment and Specialized Process Training	30

Table of Contents

OPERATIONAL CONTROLS

01 Good Manufacturing Practices

01.1 Personal Practices	33
01.2 Hand Washing	34
01.3 Clothing/Footwear/Headwear	35
01.4 Storage – Clothing/Utensils/Equipment	36
01.5 Injuries and Wounds	37
01.6 Evidence of Illness	38
01.7 Access and Traffic Patterns	39
01.8 Chemical Use	40
01.9 Chemicals Used During Operations	41

02 Shipping, Receiving and Storage

02.1 Conveyance Vehicles	42
02.2 Loading and Unloading Practices	43
02.3 Received Products	44
02.4 Shipping Conditions	45
02.5 Returned and Defective Food Products	46
02.6 Allergen Control	47
02.7 Packaging	48
02.8 Storage Practices	49
02.9 Chemical Storage	50
02.10 Waste Management	51

03 Sanitation

03.1 Cleaning and Sanitizing	52
03.2 Pre-operational Assessment	53

04 Equipment Maintenance

04.1 Preventive Maintenance and Calibration Monitoring	54
--	----

05 Pest Control

05.1 Pest Control Monitoring	55
------------------------------------	----

06 Recall

06.1 Product Code/Labelling Monitoring	56
--	----

07 Water Safety

07.1 Water Treatment Monitoring	57
07.2 Water Safety Monitoring	58

ENVIRONMENTAL CONTROLS

E1 Establishment Location and Construction

E1.1 Property and Surroundings	61
E1.2 Building Exterior	62

E2 Establishment Design

E2.1 Cross-contamination Control	63
E2.2 Personnel Facilities	64

Table of Contents

E3 Establishment Interior	
E3.1 Internal Structures and Fittings	65
E3.2 Lighting	66
E3.3 Lighting Fixtures	67
E3.4 Air Quality and Ventilation	68
E3.5 Drainage and Sewage Systems	69
E4 Equipment	
E4.1 Equipment Design, Construction and Installation	70
E4.2 Waste Containers and Utensils	71
E4.3 Hand-washing Stations	72
E5 Water Supply	
E5.1 Adequate Supply and Protection of Water, Ice and Steam	73
The <i>HACCP Advantage</i> HACCP Plan Forms	
Form #1: Product Description	78
Form #2: Ingredients and Incoming Materials	79
Form #3: Flow Diagram	81
Form #4: Plant Schematic	82
Form #5: Hazard Description and Critical Control Point Determination	83
Form #6: Flow Diagram with Critical Control Points	86
Form #7: Uncontrolled Hazards	87
Form #8: HACCP Matrix	88
Glossary	91

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The HACCP Advantage Program | Introduction

Welcome to the *HACCP Advantage*. The production of safe food products for consumers is important to everyone in the food industry. By reading this manual, you are taking the first step towards implementing an effective HACCP food safety system.

The *HACCP Advantage* consists of 57 prerequisite program standards and eight HACCP plan forms. The prerequisite programs are designed to control environmental and personnel-related hazards while the HACCP plan accounts for product and process-related hazards.

It is possible to implement an effective program with just this manual. By implementing all 57 prerequisite standards, and completing and implementing the required HACCP form section, you can create a functioning HACCP program. This will require you to have both an extensive knowledge of the facility into which the program is being implemented and a sound understanding of the principles of food safety, HACCP and the hazards associated with the food being produced. To assist you in this respect, a *HACCP Advantage* guidebook has been produced as a companion to this manual. You are strongly encouraged to refer to this guidebook as you develop your *HACCP Advantage* program since it can help you resolve many common problems.

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Prerequisites

5		The <i>HACCP Advantage</i> Prerequisite Program Standards
6		TABLE 1 Prerequisite Program Standards Summary Chart

blank page

The *HACCP Advantage* Prerequisite Program Standards

The *HACCP Advantage* prerequisite program standards are divided into four groups: control programs, training, operational controls, and environmental controls, all of which are separated by colour-coded tabs on the side of this manual. Table 1 on page six of this manual lists all of the prerequisite standards and their corresponding numbering. Each standard includes additional information to assist you in prerequisite program development. For best results, implement the prerequisite programs and ensure they are functioning effectively before you implement the HACCP plans.

Eight HACCP plan forms have been provided to guide you through the thought process involved in developing a HACCP plan. The HACCP plan forms section begins on page 77.

In addition to the standards and suggested monitoring procedures, you must specify corrective actions and documentation requirements for each standard. These requirements are not included in this manual. When monitoring any prerequisite program standard, record your observations as well as any corrective actions taken to ensure that the prerequisite standard is met. Prerequisite program documentation should identify all records that will be generated as a result of monitoring actions. For more information on this process, please refer to the *HACCP Advantage* guidebook.

Each prerequisite standard is stated at the top of each standard page in the section '**What is the standard?**'. This is the outcome you must achieve in order to meet the standard. You must design and implement an effective program that meets the intent of the standard.

Additionally, each standard page includes:

- **Which regulations apply to this standard?** – some commodity areas are regulated and have additional food safety expectations associated with a given standard. These regulatory references direct your attention to additional regulatory requirements.
- **What are the risks?** – this section explains why the standard exists and what hazard(s) it is meant to control.
- **How can you meet the standard?** – this section outlines suggested control measures frequently used in the food processing industry.
- **Are you in compliance?** – this section outlines suggested monitoring procedures you can implement to ensure this standard is being met.

The *HACCP Advantage* guidebook will provide you with more specific guidance and numerous examples for the implementation of the prerequisite standards.

Table 1 | Prerequisite Program Standards Summary Chart

CONTROL PROGRAMS	TRAINING
P1 Good Manufacturing Practices (GMPs)	T1 Good Manufacturing Practices
P1.1 Good Manufacturing Practices Program	T1.1 Good Manufacturing Practices Training
P2 Shipping, Receiving and Storage	T2 Shipping, Receiving and Storage
P2.1 Shipping, Receiving and Storage Program	T2.1 Shipping, Receiving and Storage Training
P3 Sanitation	T3 Sanitation
P3.1 Sanitation Program	T3.1 Sanitation Training
P4 Equipment Maintenance	T4 Equipment Maintenance
P4.1 Preventive Maintenance and Calibration Program	T4.1 Preventive Maintenance and Calibration Training
P5 Pest Control	T5 Pest Control
P5.1 Pest Control Program	T5.1 Pest Control Training
P6 Recall	T6 Recall
P6.1 Recall Program	T6.1 Recall Training
P7 Water Safety	T7 Water Safety
P7.1 Water Treatment Program	T7.1 Water Treatment Training
P7.2 Water Safety Monitoring Program	T7.2 Water Safety Monitoring Training
	T8 Critical Control Point
	T8.1 Critical Control Point Training
	T9 Process Technology
	T9.1 Equipment and Specialized Process Training

Table 1 | Prerequisite Program Standards Summary Chart

OPERATIONAL CONTROLS	ENVIRONMENTAL CONTROLS
01 Good Manufacturing Practices	E1 Establishment Location and Construction
01.1 Personal Practices	E1.1 Property and Surroundings
01.2 Hand Washing	E1.2 Building Exterior
01.3 Clothing/Footwear/Headwear	E2 Establishment Design
01.4 Storage – Clothing/Equipment/Utensils	E2.1 Cross-contamination Control
01.5 Injuries and Wounds	E2.2 Personnel Facilities
01.6 Evidence of Illness	E3 Establishment Interior
01.7 Access and Traffic Patterns	E3.1 Internal Structures and Fittings
01.8 Chemical Use	E3.2 Lighting
01.9 Chemicals Used During Operations	E3.3 Lighting Fixtures
02 Shipping, Receiving and Storage	E3.4 Air Quality and Ventilation
02.1 Conveyance Vehicles	E3.5 Drainage and Sewage Systems
02.2 Loading and Unloading Practices	E4 Equipment
02.3 Received Products	E4.1 Equipment Design, Construction and Installation
02.4 Shipping Conditions	E4.2 Waste Containers and Utensils
02.5 Returned and Defective Food Products	E4.3 Hand-washing Stations
02.6 Allergen Control	E5 Water Supply
02.7 Packaging	E5.1 Adequate Supply and Protection of Water, Ice, and Steam
02.8 Storage Practices	
02.9 Chemical Storage	
02.10 Waste Management	
03 Sanitation	
03.1 Cleaning and Sanitizing	
03.2 Pre-operational Assessment	
04 Equipment Maintenance	
04.1 Preventive Maintenance and Calibration Monitoring	
05 Pest Control	
05.1 Pest Control Monitoring	
06 Recall	
06.1 Product Code/Labeling Monitoring	
07 Water Safety	
07.1 Water Treatment Monitoring	
07.2 Water Safety Monitoring	

blank page

Control Programs

	P1 Good Manufacturing Practices
11	P1.1 Good Manufacturing Practices Program
	P2 Shipping, Receiving and Storage
12	P2.1 Shipping, Receiving and Storage Program
	P3 Sanitation
13	P3.1 Sanitation Program
	P4 Equipment Maintenance
14	P4.1 Preventive Maintenance and Calibration Program
	P5 Pest Control
15	P5.1 Pest Control Program
	P6 Recall
16	P6.1 Recall Program
	P7 Water Safety
17	P7.1 Water Treatment Program
18	P7.2 Water Safety Monitoring Program

blank page

P1 Good Manufacturing Practices |

P1.1 Good Manufacturing Practices Program

What is the standard?

A written Good Manufacturing Practices Program is developed and updated as required. The program outlines effective food hygiene policies and procedures to protect the safety and suitability of food. At a minimum, the program outlines good manufacturing practices policies and procedures for: personal hygiene practices; hand washing; use and storage of clothing, footwear, headwear, equipment and utensils; health and injury status; proper traffic flows; chemical use; and, where appropriate, identification of allergens and related controls and procedures required to protect the safety and suitability of food.

What are the risks?

Establishment personnel play a major role in the production of safe food. Personnel who do not follow good manufacturing practices can cause biological, chemical or physical contamination of food. Developing a Good Manufacturing Practices Program can reduce potential hazards and minimize contamination risks.

How can you meet the standard?

- Develop a written program describing establishment policies, procedures and controls regarding:
 - Personnel health status:
 - personnel must advise management when known to be suffering from a disease likely to be transmitted through food,
 - personnel are not permitted to handle exposed food during periods of illness, and
 - injuries and open sores must be secured and protected by a waterproof covering before performing work activities;
 - Personal hygiene practices:
 - proper hand-washing procedures,
 - correct use of clothing and footwear, utensils, and equipment,
 - wearing of jewelry prohibited,
 - no eating or drinking in food handling or storage areas, and
 - no smoking, chewing tobacco, chewing gum or spitting; and
 - Other good manufacturing practices:
 - identification and control of allergens,
 - procedures to follow when product falls on the floor,
 - regulated access and flow through the establishment,
 - glass control and breakage procedures,
 - proper chemical use and storage, and
 - procedures necessary to protect the safety and suitability of food;
- Systems to prevent or minimize contamination of food by physical hazards (e.g. glass, metal shards from machinery) and chemical hazards (e.g. harmful fumes, unwanted chemicals).

Which regulations apply to this standard?

Meat & Poultry:
Standards of Compliance
F1.10.01.02

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the written Good Manufacturing Practices Program to ensure that it is current and appropriate for the establishment's operations.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

P2 Shipping, Receiving and Storage |

P2.1 Shipping, Receiving and Storage Program

What is the standard?

A written Shipping, Receiving and Storage Program is developed and updated as required. The program outlines effective policies and procedures to protect the safety and suitability of food during shipping, receiving and storage activities. The program outlines roles, responsibilities and instructions for the receipt and shipment of materials.

What are the risks?

Incoming and outgoing materials that are not properly received or shipped can be a source of biological, chemical and physical contaminants. Materials received or shipped in substandard condition (e.g. wrong temperature, wrong product, damaged condition), in a container that is unsuitable or in an improper manner can lead to contamination. By ensuring the proper shipping, receiving and storage of incoming and outgoing materials you can reduce the risk of biological, chemical and physical contamination of food.

How can you meet the standard?

- Develop a written Shipping, Receiving and Storage Program that sets out policies, procedures and controls for:
 - specifications and inspection criteria (visual, sensory, microbiological testing) for incoming and outgoing materials (e.g. temperature, condition, certificate of analysis provided);
 - specifications and inspection criteria for incoming and outgoing conveyance vehicles (e.g. structurally sound, clean, pest free, suitable for the intended purpose, temperature controlled);
 - loading, unloading and arranging incoming and outgoing materials; and
 - documentation required to identify materials received or shipped, and prove receiving or shipping criteria are met.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.08.01.04, F1.08.01.05,
F1.08.01.06, F1.08.01.07,
F1.08.02.02, F1.08.03.03,
F1.09.02.02, F1.12.12.02,
F1.12.12.03

Dairy:

N/A

Other:

N/A

Are you in conformance?

At pre-determined intervals, review the written Shipping, Receiving and Storage Program to ensure that it is current and appropriate for shipping and receiving activities. Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

P3 Sanitation | P3.1 Sanitation Program

What is the standard?

A written Sanitation Program is developed and updated as required. The program outlines effective policies and procedures for sanitation activities that may impact on food safety and suitability. The program outlines the roles, responsibilities and instructions that apply to principles and methods for effective cleaning and sanitizing, safe handling of chemicals, plant-specific cleaning instructions and frequencies for equipment, utensils, rooms and outgoing conveyance vehicles, and records to be completed and maintained.

What are the risks?

Food residues and dirt may be a source of contaminants. Improper or inadequate sanitation activities can lead to contamination of food, ingredients, packaging materials and food contact surfaces. Improper chemical concentrations, application or rinsing procedures can lead to both chemical (e.g. chemical residues due to poor rinsing, no-rinse chemicals in excess of approved concentration) and biological contamination (e.g. bacteria not effectively removed from food contact surfaces). Contamination can also be caused by allergens that are not effectively removed from food contact surfaces or by cross-contamination from cleaning activities during operation.

How can you meet the standard?

- Develop an effective written Sanitation Program that sets out:
 - cleaning procedures for equipment, rooms and utensils including:
 - the personnel responsible for particular tasks,
 - the sequence of activities required for effective cleaning and sanitizing,
 - the chemicals required,
 - proper handling and application of sanitation chemicals (e.g. proper temperatures, concentrations, duration of application),
 - equipment disassembly and assembly instructions,
 - inspection activities,
 - documentation requirements, and
 - methods to prevent or minimize cross-contamination;
 - sanitation schedule for all equipment, rooms and utensils;
 - housekeeping and sanitation procedures required during operation (e.g. at change-over of product lines); and
 - effectiveness monitoring (e.g. swab tests).
- Documented cleaning procedures include where appropriate:
 - removing gross debris from surfaces;
 - applying a detergent solution to loosen soil and bacteria;
 - rinsing with potable water to remove loosened soil and residues of detergent;
 - dry cleaning or other appropriate methods for removing and collecting residues and debris; and
 - where necessary, sanitizing with subsequent rinsing unless the manufacturers' instructions indicate that there is no scientific need for rinsing.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.05.01.01, F1.05.01.02,
F1.05.02.02, F1.05.02.03,
F1.05.03.03, F1.05.04.01,
F1.05.04.02, F1.08.01.12,
F1.08.03.01

Dairy:

The Milk Act (Ontario)
R.R.O.1990, Reg.761, s.41

Other:

N/A

Are you in conformance?

At pre-determined intervals, review the written Sanitation Program for completeness, accuracy and suitability for the establishment's operations.

Record your observations to prove that the monitoring task was completed. Initial and date the record.

P4 Equipment Maintenance |

P4.1 Preventive Maintenance and Calibration Program

What is the standard?

A written Preventive Maintenance and Calibration Program is developed and updated as required. The program outlines effective policies and procedures to ensure that equipment and devices that may impact on food safety function as intended and protect the safety and suitability of food. The program includes roles, responsibilities, frequencies, instructions for effective preventive maintenance and calibration activities and records to be completed and maintained.

What are the risks?

Improperly maintained or calibrated equipment can lead to contamination of food, ingredients or packaging materials. Deteriorating or poorly maintained equipment (e.g. pitted, cracked) can present physical hazards (e.g. flaking metal, nuts, bolts) or provide areas for bacterial growth. Over-lubrication of equipment can cause chemical contamination. Equipment and devices used to measure parameters that have an impact on food safety must be properly calibrated. If equipment or measuring devices used to perform critical process monitoring (e.g. pH, water activity, cooking temperature, concentration of restricted ingredients, metal detection) are not accurate, food safety hazards can result (e.g. inaccurate thermometers can result in a bacterial hazard).

How can you meet the standard?

- Develop an effective written Preventive Maintenance and Calibration Program that sets out:
 - procedures for maintenance and calibration of equipment and devices that impact on food safety, including:
 - personnel responsible for particular tasks,
 - description of preventive maintenance activities to be performed (e.g. grease, lubricate, clean or change equipment filters),
 - description of calibration activities to be performed (e.g. calibrate thermometer, water activity meter, scales),
 - required sequence of activities to perform preventive maintenance and calibration activities,
 - identification of materials or chemicals (e.g. lubricants, solvents) required,
 - documentation requirements, and
 - methods to prevent or minimize cross-contamination; and
 - preventive maintenance and calibration schedule or frequency of activities.
- Design the preventive maintenance and calibration program to ensure that the equipment functions as intended and that no physical, biological or chemical hazard potential results.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.06.02.01.02, F1.06.02.01.03,
F1.06.02.01.04, F1.06.02.04.02,
F1.12.12.07

Dairy:

N/A

Other:

N/A

Are you in conformance?

At pre-determined intervals, review the written Preventive Maintenance and Calibration Program for completeness, accuracy and suitability for the establishment's operations.

Record your observations to prove that the monitoring task was completed. Initial and date the record.

P5 Pest Control | P5.1 Pest Control Program

What is the standard?

A written Pest Control Program is developed and updated as required. The program outlines effective policies and procedures to prevent entry and harbourage of pests, to detect and eliminate pests, and to protect the safety and suitability of food. The program includes roles and responsibilities, frequencies, instructions for pest control activities, and records to be completed and maintained.

What are the risks?

Pests (e.g. insects, rodents and birds) can contaminate food, ingredients, packaging materials and food contact surfaces. Pests in or around an establishment can lead to contamination from droppings, larvae and dead insects or animals or their parts.

How can you meet the standard?

- Develop an effective written Pest Control Program that sets out:
 - pest control procedures for the exterior and interior of the establishment including:
 - personnel responsible for particular tasks,
 - the activities to be performed,
 - the chemicals required,
 - the methods for proper handling and application of pest control chemicals to ensure that maximum residue limits are not exceeded,
 - the type and location of pest control devices (e.g. live traps, insect devices),
 - documentation requirements, and
 - methods to prevent or minimize cross-contamination; and
 - pest control schedule or frequency of activities.
- Ensure that birds and animals, other than any intended for slaughter, are excluded from the establishment.
- Use only pesticides that are registered under the *Pest Control Products Act* and regulations.
- Use only approved pesticides listed in “Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents” published by the Canadian Food Inspection Agency.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.07.01.01, F1.07.01.03,
F1.07.03.01, F1.07.01.06,
F1.07.03.02

Dairy:

N/A

Other:

N/A

Are you in conformance?

At pre-determined intervals, review the written Pest Control Program for completeness, accuracy and suitability for the establishment's operations.

Record your observations to prove that the monitoring task was completed. Initial and date the record.

P6 Recall | P6.1 Recall Program

What is the standard?

A written Recall Program is developed and updated as required. The program outlines effective policies and procedures that enable the identification and complete, rapid recall of any implicated food product. The program includes roles and responsibilities, details and methods of recall activities, and records to be completed and maintained. The recall program is tested for effectiveness and completeness at pre-determined intervals.

What are the risks?

Food recalls can be triggered by biological (e.g. *Salmonella*), chemical (e.g. undeclared allergens), or physical hazards (e.g. foreign material). Quickly re-gaining control of implicated lots of product is crucial in preventing or minimizing the risk of the hazard to consumers.

How can you meet the standard?

- Develop an effective written Recall Program that sets out:
 - personnel responsible for the co-ordination and implementation of a recall including their contact numbers and a description of each person's role;
 - procedures required to identify, locate and control (e.g. hold under supervision) recalled products until a product disposition is made (e.g. used for purposes other than human consumption; determined to be safe for human consumption; reprocessed in a manner to ensure their safety);
 - procedures to investigate the potential for other products to be affected, and locate and control them;
 - methods to investigate and respond to consumer complaints;
 - the capability to access customer and supplier names, addresses and contact numbers if required;
 - procedures to test the effectiveness of the recall program by performing a mock recall at pre-determined intervals;
 - procedures to notify appropriate regulatory agencies in the event of a recall; and
 - documentation requirements.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.12.10.01.06, F1.12.16.07.02,
F1.15.01.01, F1.15.01.03,
F1.15.02.02

Dairy:

The Milk Act (Ontario) R.R.O.
1990. O.Reg. 761.s.127(2);
s.129(3)(4)

Other:

N/A

Are you in conformance?

At pre-determined intervals, perform a mock recall exercise to test the effectiveness and capabilities of the recall program in rapidly identifying, locating and controlling product(s).

At pre-determined intervals, review the written recall program for completeness, accuracy and suitability for the establishment's operations.

Record monitoring results to prove that the monitoring task was completed. Initial and date the record.

P7 Water Safety | P7.1 Water Treatment Program

What is the standard?

Where potable municipal water is unavailable or not used, a written Water Treatment Program is developed and updated as required. The program ensures that water, ice or steam used for processes or applications that may impact on food safety meet the potability requirements of the appropriate regulatory authority and describes effective water treatment procedures to protect the safety and suitability of food. The program includes roles and responsibilities, frequencies, instructions and methods for effective water treatment, and records to be completed and maintained.

What are the risks?

The water, ice and steam supply of an establishment can be a source of contaminants. Since water, ice and steam can be used for a variety of purposes (e.g. sanitation, hand washing, ingredient processing aid), non-potable water can lead to contamination (e.g. *E. coli*) of food, ingredients, food contact surfaces or personnel. Treated water (e.g. boiler water, chlorinated water, flume water) can present a source of contaminants if the chemical treatment or treatment process is incorrectly performed.

How can you meet the standard?

- Develop and maintain an effective written Water Treatment Program for non-municipal water supply, re-circulated water and treated water that sets out:
 - water treatment procedures, including:
 - personnel responsible for particular tasks,
 - water treatment activities to be performed (e.g. chlorination, ozonation, treatment of boiler water),
 - chemicals required,
 - proper handling and application of water treatment chemicals (e.g. proper concentrations),
 - methods to prevent or minimize cross-contamination, and
 - documentation requirements;
 - water treatment schedule and frequency of activities; and
 - procedures to ensure water filters are effective and maintained in a sanitary manner.
- Use only boiler treatment chemicals listed in the “Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products” published by the Canadian Food Inspection Agency or the chemicals for which the manufacturer has a letter of no objection from Health Canada.
- Ensure that water re-circulated for re-use is treated and maintained in such a condition that no risk to the safety and suitability of food results from its use.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

All:
Safe Drinking Water Act (Ontario, 2002)
O. Reg 169/03 Ontario Drinking – Water Quality Standards Regulation,
O. Reg 170/03 Drinking Water Systems

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the written Water Treatment Program for completeness, accuracy and suitability for the establishment's operations.

Record your observations to prove that the monitoring task was completed. Initial and date the record.

P7 Water Safety | P7.2 Water Safety Monitoring Program

What is the standard?

A written Water Safety Monitoring Program is developed and updated as required. The program ensures that establishment water, ice and steam used for processes or applications that may impact on food safety meet the potability requirements of the appropriate regulatory authority, and describes effective water, ice and steam sampling and testing procedures to protect the safety and suitability of food. The program includes roles and responsibilities, frequencies, instructions and methods for effective water sampling and testing, and records to be completed and maintained.

What are the risks?

Water, ice and steam can be a source of biological or chemical contaminants. Since water, ice and steam can be used for a variety of purposes (e.g. sanitation, hand washing, ingredient, processing aid), it is important to perform water sampling and testing to confirm potability. Potential water contaminants include bacteria (e.g. *E. coli*) and chemicals (e.g. boiler chemicals).

How can you meet the standard?

- Develop an effective written water safety monitoring program that sets out:
 - water sampling and testing procedures, including:
 - personnel responsible for particular tasks,
 - description of water sampling and testing activities to be performed (e.g. tests to be performed – chlorine levels, aerobic plate count, coliform, faecal coliform, boiler chemical levels),
 - required sequence of activities to perform water sampling and testing activities,
 - identification of chemicals and reagents required,
 - sample submission to an accredited laboratory, where applicable, and
 - documentation requirements (records should include the water source, sample site, analytical result, analyst and date of sample);
 - water sampling and testing schedule and frequency of activities; and
 - actions to be taken when water testing results indicate water potability criteria have not been met.

Which regulations apply to this standard?

Meat & Poultry:
Standards of Compliance
F1.04.02.03, F1.04.02.04

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the written Water Safety Monitoring Program for completeness, accuracy and suitability for the establishment's operations.

Record your observations to prove that the monitoring task was completed. Initial and date the record.

Training

	T1 Good Manufacturing Practices
21	T1.1 Good Manufacturing Practices Training
	T2 Shipping, Receiving and Storage
22	T2.1 Shipping, Receiving and Storage Training
	T3 Sanitation
23	T3.1 Sanitation Training
	T4 Equipment Maintenance
24	T4.1 Preventive Maintenance and Calibration Training
	T5 Pest Control
25	T5.1 Pest Control Training
	T6 Recall
26	T6.1 Recall Training
	T7 Water
27	T7.1 Water Treatment Training
28	T7.2 Water Safety Monitoring Training
	T8 Critical Control Point
29	T8.1 Critical Control Point Training
	T9 Process Technology
30	T9.1 Equipment and Specialized Process Training

blank page

T1 Good Manufacturing Practices |

T1.1 Good Manufacturing Practices Training

What is the standard?

Good Manufacturing Practices Training is delivered and updated as required to ensure that personnel understand and are competent in the policies and procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

Establishment personnel play a major role in the production of safe food. Personnel who do not follow good manufacturing practices can cause biological, chemical or physical contamination of food. Training increases awareness of potential hazards and the responsibilities that personnel have in minimizing contamination risks.

How can you meet the standard?

- Train all personnel on the concepts and policies of an effective good manufacturing practices program including all elements of the written program developed in response to section P1.1 Good Manufacturing Practices Programs.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver the training to personnel at the start of employment and provide refresher training to personnel at appropriate intervals.
- Upon completion of personnel training, note the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
Standards of Compliance
F1.10.01.01, F1.12.12.10

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the Good Manufacturing Practices Training to ensure that it is current and appropriate for the establishment's operations.

At pre-determined intervals, review personnel training records for conformance, completeness and accuracy.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

T2 Shipping, Receiving and Storage |

T2.1 Shipping, Receiving and Storage Training

What is the standard?

Shipping, Receiving and Storage Training is delivered and updated as required to ensure that personnel involved in shipping, receiving and storage activities understand and are competent in the procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

Incoming and outgoing materials that are not properly received or shipped can be a source of biological, chemical and physical contamination. Materials received or shipped in substandard condition (e.g. wrong temperature, wrong product, damaged condition), in a container that is unsuitable or in an improper manner can lead to contamination. Proper training of shipping or receiving employees reduces the risk of biological, chemical and physical contamination of food.

How can you meet the standard?

- Train designated personnel on the concepts, policies and procedures of an effective shipping, receiving, and storage program including all elements of the written program developed in response to section P2.1 Shipping, Receiving, and Storage Program.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver the training to employees at the start of employment and provide refresher training at appropriate intervals.
- Upon completion of personnel training, note the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
The Milk Act (Ontario)
O.Reg. 761.s.87

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the Shipping, Receiving and Storage Training to ensure that it is current and appropriate for shipping and receiving activities.

At pre-determined intervals, review shipping and receiving personnel training records for conformance, completeness and accuracy.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

T3 Sanitation | T3.1 Sanitation Training

What is the standard?

Sanitation Training is delivered and updated as necessary to ensure personnel involved in sanitation activities understand and are competent in the procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

Poor or improper establishment sanitation can lead to contamination (e.g. bacteria, cleaning chemicals). Improper chemical concentrations, application or rinsing procedures can lead to contamination of food with sanitation chemicals. Proper training of sanitation employees reduces the risk of biological, chemical and physical contamination of food.

How can you meet the standard?

- Train designated personnel on the concepts, policies and procedures of an effective sanitation program including all elements of the written program developed in response to section P3.1 Sanitation Program.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver the training to sanitation personnel at the start of employment and to provide refresher training at appropriate intervals.
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the Sanitation Training to ensure that it is current and appropriate for sanitation activities.

At pre-determined intervals, review sanitation personnel training records for conformance, completeness and accuracy.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

T4 Equipment Maintenance |

T4.1 Preventive Maintenance and Calibration Training

What is the standard?

Preventive Maintenance and Calibration Training is delivered and updated as required to ensure personnel involved in preventive maintenance and calibration activities understand and are competent in the procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

Poor or improper maintenance and calibration activities can lead to contamination. Personnel performing maintenance and calibration tasks can present a source of biological contamination (e.g. standing on equipment to work on overhead items), a source of chemical contamination (e.g. non-food grade grease) or a source of physical contamination (e.g. tools or other items falling into product or equipment). Improperly performed maintenance activities can lead to malfunctioning equipment which can result in leaking of lubricants, bacterial growth or contamination with damaged equipment. Proper training of personnel performing maintenance and calibration activities reduces the risk of biological, chemical and physical contamination of food.

How can you meet the standard?

- Train designated personnel on the concepts, policies and procedures of an effective preventive maintenance and calibration program including all elements of the written program developed in response to P4.1 Preventive Maintenance and Calibration Programs.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver the training to maintenance personnel at the start of employment and provide refresher training at appropriate intervals.
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the Preventive Maintenance and Calibration Training to ensure that it is current and appropriate for maintenance monitoring and corrective action activities.

At pre-determined intervals, review maintenance personnel training records for conformance, completeness and accuracy.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

T5 Pest Control | T5.1 Pest Control Training

What is the standard?

Pest Control Training is delivered and updated as required to ensure that personnel involved in pest control activities understand and are competent in procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

Poor or improper pest control activities can lead to contamination (e.g. food contamination by pesticides or contamination from pests that gain entry to the establishment). Proper training of personnel performing pest control activities reduces the risk of contamination of food.

How can you meet the standard?

- Ensure that personnel performing pest control activities are adequately trained through one of the following methods:
 - ensure that contracted pest control operators are certified to apply pesticides in a food establishment; or
 - train designated personnel on the concepts, policies, and procedures of an effective pest control program including all elements of the written program developed in response to section P5.1 Pest Control Program.
- At the start of employment and appropriate intervals,
 - review the qualifications of contracted pest control operators; or
 - deliver the training to personnel who perform pest control activities and deliver refresher training at appropriate intervals.
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant(s) in a permanent record.
- Routinely review and update training to ensure it is appropriate and current.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.07.01.02.01, F1.07.01.05

Dairy:

N/A

Other:

N/A

Are you in conformance?

At pre-determined intervals, review the qualifications of contracted pest control operators, ensure the training schedule is being followed as written and review the Pest Control Training to ensure that it is current and effective.

At pre-determined intervals, review pest control training records for conformance, completeness and accuracy.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

T6 Recall | T6.1 Recall Training

What is the standard?

Recall Training is delivered and updated as required to ensure that personnel involved in recall activities understand and are competent in procedures necessary in the event that the safety and suitability of food is compromised. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

Food recalls can be triggered by biological (e.g. *Salmonella*), chemical (e.g. undeclared allergens) or physical hazards (e.g. foreign material). Quickly re-gaining control of implicated lots of product is crucial in preventing or minimizing the risk of the hazard to consumers.

How can you meet the standard?

- Train designated personnel on the concepts, policies and procedures of an effective recall program including all elements of the written program developed in response to section P6.1 Recall Programs.
- Perform a mock recall at pre-determined intervals to ensure that all identified food products can be accounted for within a short time period and that recall training is adequate.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver training to all personnel who have a responsibility as part of the recall program and provide refresher training at appropriate intervals.
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals review the Recall Training to ensure that it is current and appropriate for recall monitoring and corrective action activities.

At pre-determined intervals review recall personnel training records for conformance, completeness and accuracy.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

T7 Water Safety | T7.1 Water Treatment Training

What is the standard?

Water Treatment Training is delivered and updated as required to ensure that personnel involved in water treatment activities understand and are competent in procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

The water, ice and steam supply of an establishment can be a source of contaminants. Since water, ice and steam can be used for a variety of purposes (e.g. sanitation, hand washing, ingredient, processing aid), non-potable water can contaminate food, ingredients, food contact surfaces and personnel. Treated water (e.g. boiler water, chlorinated water, flume water) can be a source of contaminants if the chemical treatment or treatment process is incorrectly performed.

How can you meet the standard?

- Train designated personnel on the concepts, policies and procedures of an effective water treatment program including all elements of the written program developed in response to section P7.1 Water Treatment Program.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver training to employees responsible for water treatment activities and provide refresher training at appropriate intervals.
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the Water Treatment Training to ensure that it is current and appropriate.

At pre-determined intervals, review water treatment personnel training records for conformance, completeness and accuracy.

Record monitoring results to prove that the monitoring tasks were completed. Initial and date the record.

T7 Water Safety | T7.2 Water Safety Monitoring Training

What is the standard?

Water Safety Monitoring Training is delivered and updated as required to ensure that personnel involved in water monitoring activities understand and are competent in procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

Water, ice and steam can be a source of biological or chemical contaminants. Since water, ice and steam can be used for a variety of purposes (e.g. sanitation, hand washing, ingredient or processing aid), it is important to perform water sampling and testing to confirm potability. Potential water contaminants include bacteria (e.g. *E. coli*) and chemicals (e.g. boiler chemicals).

How can you meet the standard?

- Train designated personnel on the concepts, policies and procedures of an effective water safety monitoring program including all elements of the written program developed in response to section P7.2 Water Safety Monitoring Program.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver the training to personnel responsible for water monitoring activities and provide refresher training at appropriate intervals.
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the Water Safety Monitoring Training to ensure that it is current and appropriate.

At pre-determined intervals, review water safety monitoring personnel training records for conformance, completeness and accuracy.

Record monitoring results to prove that the monitoring tasks were completed. Initial and date the record.

T8 Critical Control Point | T8.1 Critical Control Point Training

What is the standard?

Critical Control Point (CCP) Training is delivered and updated as required to ensure that all personnel involved in CCP activities understand and are competent in the procedures necessary to protect the safety and suitability of food. Training is delivered at an adequate frequency to ensure personnel understanding remains current.

What are the risks?

CCPs are identified for hazards that cannot be controlled by the prerequisite programs. CCPs are designed to reduce, control or eliminate potential hazards. If CCP procedures are not properly performed and monitored, the safety of the food is compromised. If personnel performing CCP procedures are not properly trained, biological, chemical or physical hazards can occur.

How can you meet the standard?

- Train designated personnel on the concepts and procedures of an effective HACCP plan including all elements of the written documentation developed for Form 8 of the HACCP plan. For each CCP, deliver training that includes policies, procedures and controls for:
 - critical limits;
 - monitoring tasks (how to check that the critical limits are met);
 - corrective actions (what to do if critical limits are not met);
 - required documentation to prove CCP monitoring and, if necessary, any corrective actions that have taken place; and
 - ensuring that personnel responsible for monitoring a CCP identified in the establishment's manufacturing process receive training before being assigned the work task or procedure.
- Routinely review and update training to ensure it is appropriate and current.
- Deliver the CCP training at the start of employment to personnel responsible for monitoring CCPs and provide refresher training at appropriate intervals.
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, review the CCP Training to ensure that it is current and appropriate for CCP monitoring and corrective action activities.

At pre-determined intervals, review CCP personnel training records for conformance, completeness and accuracy.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

T9 Process Technology |

T9.1 Equipment and Specialized Process Training

What is the standard?

A written Equipment and Specialized Process Training Program is developed and updated as required to ensure that personnel assigned to operate specialized equipment that can impact on food safety and suitability understand and are competent in the procedures necessary to protect the safety and suitability of food. The training program is delivered at an adequate frequency to ensure employee understanding remains current.

What are the risks?

Specialized process technology typically changes the characteristics of food products. If this technology does not function properly or is operated by inadequately trained personnel, contamination can result, affecting the safety and suitability of food.

How can you meet the standard?

- Develop a written training program or an off-site training schedule that ensures personnel responsible for operating specialized equipment or technology that can impact on food safety have attained an adequate level of knowledge to ensure the safety and suitability of food.
- Routinely review and update training to ensure programs are appropriate and current.
- At the start of employment and at appropriate intervals:
 - deliver the training program to personnel who operate specialized equipment or technology; or
 - organize appropriate off-site training (e.g. equipment manufacturer's training course).
- Upon completion of personnel training, record the date, type of training, name of trainer and name of participant(s) in a permanent record.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, ensure the off-site training schedule is being followed as written or review the written specialized equipment or technology training program to ensure that it is current and effective.

At pre-determined intervals, review specialized equipment or technology training records for conformance, completeness and accuracy.

Record monitoring results to prove that the monitoring tasks were completed. Initial and date the record.

Operational Controls

	01 Good Manufacturing Practices
33	01.1 Personal Practices
34	01.2 Hand Washing
35	01.3 Clothing/Footwear/Headwear
36	01.4 Storage – Clothing/Equipment/Utensils
37	01.5 Injuries and Wounds
38	01.6 Evidence of Illness
39	01.7 Access and Traffic Patterns
40	01.8 Chemical Use
41	01.9 Chemicals Used During Operations
	02 Shipping, Receiving and Storage
42	02.1 Conveyance Vehicles
43	02.2 Loading and Unloading Practices
44	02.3 Received Products
45	02.4 Shipping Conditions
46	02.5 Returned and Defective Food Products
47	02.6 Allergen Control
48	02.7 Packaging
49	02.8 Storage Practices
50	02.9 Chemical Storage
51	02.10 Waste Management
	03 Sanitation
52	03.1 Cleaning and Sanitizing
53	03.2 Pre-operational Assessment
	04 Equipment Maintenance
54	04.1 Preventive Maintenance and Calibration Monitoring
	05 Pest Control
55	05.1 Pest Control Monitoring
	06 Recall
56	06.1 Product Code/Labelling Monitoring
	07 Water Safety
57	07.1 Water Treatment Monitoring
58	07.2 Water Safety Monitoring

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01 Good Manufacturing Practices | 01.1 Personal Practices

What is the standard?

All personnel follow personal practices that prevent or minimize contamination of food, ingredients, packaging materials and food contact surfaces. Personnel do not eat, use tobacco, drink, chew gum, spit, sneeze or cough over food or food contact surfaces, or perform any other potentially hazardous activities in areas where food or packaging materials are being processed, handled or stored. Objects, such as jewelry, that may cause contamination are removed or are suitably covered prior to starting work duties. Personnel maintain an appropriate degree of personal cleanliness.

What are the risks?

The potential for contamination of food, ingredients, packaging materials and food contact surfaces by microorganisms and physical contaminants is greatly increased if activities such as eating, drinking, gum chewing, use of tobacco, jewelry wearing or spitting are practiced in food handling areas. Foreign objects found in food products can lead to consumer complaints or injuries. Personnel who do not maintain an appropriate degree of personal cleanliness can contaminate food.

How can you meet the standard?

- Ensure that personnel practice behaviours that prevent or minimize contamination of food, ingredients, packaging materials or food contact surfaces, including:
 - no personal food, beverages or medication in food handling or storage areas;
 - no smoking, chewing tobacco, chewing gum or spitting;
 - no wearing of jewelry or jewelry is suitably covered, nail polish, false eyelashes or nails, etc. in food handling or storage areas;
 - no glass containers (except those specifically for the product being produced) permitted in food handling and storage areas; and
 - no items that may cause physical contamination in food handling and storage areas (e.g. badges, pins, barrettes).
- Ensure that personnel maintain an adequate degree of personal cleanliness (e.g. shower or bathe prior to work).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.23; s.24

Standards of Compliance
F1.10.02.02.03, F1.10.02.03,
F1.10.03.01

Dairy:

The Milk Act (Ontario)
O.Reg. 761, s.80

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.65–s.67

Are you in conformance?

At pre-determined intervals, confirm that all personnel are following appropriate behaviours to ensure food, ingredients, packaging materials and food contact surfaces are not contaminated. Confirm that personnel reporting to work maintain an adequate level of personal cleanliness and hygiene.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices | 01.2 Hand Washing

What is the standard?

To prevent or minimize food contamination, effective hand washing is performed by all personnel who enter the food processing and handling areas or who handle food, ingredients, packaging materials or food contact surfaces. Hand washing is performed with warm potable water, soap and hygienic drying apparatus upon entering food processing and handling areas; prior to handling food, ingredients, packaging materials or food contact surfaces; following breaks or use of toilet facilities; and when hands become contaminated.

What are the risks?

Personnel are a common source of bacterial contamination of food, ingredients, packaging materials and food contact surfaces. Since allergens can be carried on the hands of food handlers, proper hand-washing procedures must be followed after handling products containing allergens. Proper and frequent hand washing helps to reduce the potential for bacterial contamination.

How can you meet the standard?

- Ensure that personnel wash their hands properly and frequently whenever entering the establishment or work area, following use of personal welfare areas (e.g. lunch room, toilet facilities, change room) and following any action that may contaminate their hands (e.g. tying of shoes, sneezing, coughing).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/93, s.22(1)

Standards of Compliance
F1.10.03.02, F1.12.04.03.04

Dairy:

N/A

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.65

Are you in conformance?

At pre-determined intervals, confirm that personnel are properly following hand-washing procedures.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices |

01.3 Clothing/Footwear/ Headwear

What is the standard?

Clothing, footwear and headwear worn by personnel and visitors in processing and handling areas prevent or minimize the contamination of food, ingredients, packaging materials and food contact surfaces. Clothing, footwear and headwear used in the establishment are stored and handled in a manner that prevents or minimizes contamination of food, ingredients, packaging materials and food contact surfaces.

What are the risks?

Cross-contamination with microorganisms or trace allergen products is commonly due to direct or indirect transfer of microorganisms or allergens from people to food, ingredients, packaging materials or food contact surfaces. Cross-contamination can occur from unhygienic clothing or footwear (e.g. soiled clothing).

How can you meet the standard?

- Ensure all personnel and visitors wear suitable clothing (e.g. coats, aprons, gloves, head covering, face covering or footwear) in areas where food, ingredients, packaging materials and food contact surfaces are exposed.
- Ensure that clothing, footwear and headwear are of a design that is durable and cleanable or single-use.
- Ensure that personnel put suitable clothing and footwear on before entering food handling or storage areas.
- Ensure that clothing, footwear and headwear are clean (e.g. free of soil) and in good repair (e.g. no loose threads, holes).
- Designate acceptable areas for the storage of clothing (e.g. aprons, gloves, smocks) and footwear that will not lead to cross-contamination.
- Ensure that personnel properly store clothing and footwear in designated areas.
- Ensure that clothing and footwear are not worn or taken into areas of the establishment that have the potential to cause contamination (e.g. incompatible processing areas – raw or cooked; personal welfare areas; outside the establishment).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.22.(2)

Standards of Compliance
F1.10.02.01, F1.10.02.02.01,
F1.10.02.02.02, F1.10.02.04,
F1.10.02.05, F1.11.02.03.01,
F1.11.02.04

Dairy:

The Milk Act (Ontario) R.R.O.
1990. O.Reg. 761.s.80(2);
s.107(1)

Other:

*The Health Protection and
Promotions Act (Ontario)*
O.Reg. 562, s.11; s.65; s.67

Are you in conformance?

At pre-determined intervals, confirm that all personnel are wearing appropriate clothing for the task being performed and that the clothing is clean and in a good state of repair. This review should be performed at various times to ensure that personnel performing all activities (e.g. operational, sanitation, maintenance) are wearing clothing suitable for each activity.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices |

01.4 Storage – Clothing/Utensils/Equipment

What is the standard?

Clothing, utensils and equipment used in the establishment are stored and handled in a manner that prevents or minimizes contamination of food, ingredients, packaging materials and food contact surfaces.

What are the risks?

Cross-contamination with microorganisms or trace allergen products is commonly due to direct or indirect transfer of microorganisms or allergens from people to food, ingredients, packaging materials or food contact surfaces. Improperly stored and handled clothing, utensils and equipment can be a source of cross-contamination (e.g. soiled clothing left on food contact surfaces, use of contaminated utensils).

How can you meet the standard?

- Designate acceptable areas for the storage of clothing, utensils and equipment that will not lead to cross-contamination.
- Ensure that personnel properly store clothing, utensils and equipment in designated areas.
- Ensure that clothing, utensils and equipment are not taken into areas of the establishment that have the potential to cause contamination (e.g. incompatible processing areas – raw or cooked; personal welfare areas; outside the establishment).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.19.(6),(7)

Standards of Compliance
F1.11.02.02

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.86(1)

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.11; s. 56;
s.58–62; s.65; s.67; s.71–82

Are you in conformance?

At pre-determined intervals, confirm that personnel are storing clothing, footwear, utensils and equipment in designated areas.

Confirm that clothing, footwear, utensils and equipment are not worn or taken into areas of the establishment that have the potential to cause contamination.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices | 01.5 Injuries and Wounds

What is the standard?

Personnel having open cuts or wounds do not handle exposed food, ingredients, packaging materials or food contact surfaces unless measures are taken to prevent direct or indirect contamination of food. When injuries or wounds occur during food processing or handling activities, measures are taken to ensure that suspect food, ingredient and packaging materials are disposed of and food contact surfaces are cleaned and sanitized.

What are the risks?

Open cuts and wounds that are not appropriately bandaged or covered can be a source of biological contaminants.

How can you meet the standard?

- Ensure that personnel with open cuts or wounds take appropriate precautions to avoid contaminating food, ingredients, packaging materials and food contact surfaces including:
 - securely protecting all open cuts and wounds with waterproof bandages or coverings;
 - changing all waterproof coverings at a frequency that allows for continual protection; and
 - reporting all cuts and wounds sustained in the workplace to the management immediately for appropriate first aid and application of protective coverings.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.22.(1)

Dairy:

N/A

Other:

N/A

Are you in conformance?

At pre-determined intervals, observe personnel to confirm that all cuts and wounds are securely covered with waterproof covering or bandages.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices | 01.6 Evidence of Illness

What is the standard?

Personnel known or suspected to be suffering from or to be carriers of a disease transmissible through food do not enter any food processing or handling areas, or handle food, ingredients, packaging materials or food contact surfaces without taking measures to prevent contamination.

What are the risks?

Personnel suffering from diseases transmissible through food (e.g. *Salmonella*, Hepatitis A) can transmit these diseases to food products and ultimately infect the consumer.

How can you meet the standard?

- Ensure personnel with diseases transmissible through food do not handle or work around food, ingredients, packaging materials or food contact surfaces.
- Ensure personnel immediately report to management when they are suffering from, show symptoms of, or are known to be carriers of a disease transmissible through food.
- Ensure medical examination of a food handler is carried out if clinically or epidemiologically indicated.
- Ensure that the following symptoms are reported to management so that any need for medical examination or possible exclusion from food handling can be considered:
 - jaundice;
 - diarrhea;
 - vomiting;
 - fever;
 - sore throat with fever;
 - visibly infected skin lesions (e.g. boils, cuts); or
 - discharges from the ear, eye or nose.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.22.(1)

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.107(1)

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.65; s.66

Are you in conformance?

At pre-determined intervals, observe personnel for evidence of illness or behaviour that may indicate sickness (e.g. frequent trips to washroom, vomiting). Ensure that personnel suffering from or known to be carriers of a disease transmissible through food do not handle exposed food, ingredients, packaging materials or food contact surfaces.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices |

01.7 Access and Traffic Patterns

What is the standard?

Access of persons is controlled to prevent or minimize contamination of food, ingredients, packaging materials and food contact surfaces. Personnel follow designated traffic patterns to prevent or minimize contamination of food, ingredients, packaging materials and food contact surfaces.

What are the risks?

Cross-contamination with microorganisms or allergens is commonly due to direct or indirect transfer of microorganisms or allergens from people to food, ingredients, packaging materials or food contact surfaces. Personnel and visitors can be a source of contamination to food, ingredients, packaging materials and food contact surfaces if their movement and activities are not controlled. If access to the establishment is not controlled and designated traffic patterns are not followed, contamination can result.

How can you meet the standard?

- Control access to the establishment to prevent or minimize entry of unauthorized individuals.
- Develop and enforce appropriate personnel and visitor traffic patterns to reduce the potential for cross-contamination.
- Ensure that personnel and visitors follow the designated traffic patterns and procedures to reduce the risk of contamination (e.g. personnel handling raw products do not enter ready-to-eat product areas).

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, confirm that access to the establishment is controlled and that personnel and visitors are following designated traffic patterns and procedures to reduce the risk of contamination.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices | 01.8 Chemical Use

What is the standard?

Chemicals are mixed in clean, correctly labelled containers, in the correct concentrations, and are dispensed and handled only by authorized and properly trained personnel. Chemicals are suitable for use within a food processing establishment and when used correctly do not present a food safety hazard.

What are the risks?

Sanitation chemicals that are not dispensed and handled by properly trained personnel according to label instructions can lead to ineffective sanitation activities or chemical residues on equipment and surfaces. Maintenance chemicals and lubricants that are not dispensed or handled properly can lead to contamination (e.g. over-greasing). Chemicals mixed or stored in containers that are not clean or correctly labelled can contaminate food, ingredients, packaging materials or food contact surfaces if the chemicals are not used for the intended purpose.

How can you meet the standard?

- Ensure that chemicals used within the establishment are listed in the “Reference Listing of Accepted Construction, Packaging Materials and Non-food Chemical Agents” published by the Canadian Food Inspection Agency or the manufacturer has a “letter of no objection” from Health Canada.
- Ensure that chemicals are measured to ensure correct concentrations for effective sanitation or maintenance activities.
- Ensure that personnel applying chemicals (e.g. sanitation chemicals, maintenance chemicals, lubricants and solvents) are appropriately trained and authorized to handle and apply them.
- Ensure that personnel handle chemicals in a manner that prevents or minimizes contamination of food, ingredients, packaging materials and food contact surfaces.
- Ensure that personnel use properly labelled containers for dispensing and handling of chemicals and clean or rinse containers properly when finished.

Which regulations apply to this standard?

Meat & Poultry:
Standards of Compliance
F1.05.03.01, F1.05.03.02,
F1.06.02.03, F1.07.01.04

Dairy:
N/A

Other:
*The Health Protection and
Promotions Act (Ontario)*
O.Reg. 562, s.63; s.79

Are you in conformance?

At pre-determined intervals, confirm that only trained personnel are dispensing and handling chemicals. Confirm that chemicals are handled, mixed and applied in the correct concentrations and in a manner that prevents or minimizes contamination. Confirm that containers used for chemical mixing and handling are properly labelled, used only for the intended purpose and are cleaned or rinsed properly following use.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

01 Good Manufacturing Practices |

01.9 Chemicals Used During Operations

What is the standard?

Chemicals used during operations are handled and stored in a manner that prevents contamination of food, ingredients, packaging materials and food contact surfaces. Chemicals used during operations are in appropriately labelled containers or dispensers.

What are the risks?

Chemicals used during operations can contaminate food, ingredients, packaging materials, food contact surfaces and personnel if chemical handling, mixing and storage activities are not performed correctly (e.g. chemicals in containers without lids can spill). Overspray of sanitation chemicals can lead to chemical or biological contamination during operational cleaning activities.

How can you meet the standard?

- Ensure that chemicals (e.g. sanitation chemicals, maintenance chemicals, lubricants, solvents) used in food handling areas during operations are stored and handled in a manner that prevents or minimizes contamination of food, ingredients, packaging materials or food contact surfaces.
- Ensure that cleaning activities required during operations are performed as written in the Sanitation Program (P3.1) and do not create the potential for contamination of food, ingredients, packaging materials or food contact surfaces.
- Ensure that maintenance activities required during operations do not create the potential for contamination of food, ingredients, packaging materials and food contact surfaces.
- Take measures to ensure that chemicals in food handling areas do not contaminate food, ingredients, packaging materials or food contact surfaces (e.g. cover with plastic covers or use curtains).

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.43(1)

Other:
The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.63; s.79

Are you in conformance?

At pre-determined intervals, observe handling and storage of chemicals during operations to confirm that contamination of food, ingredients, packaging materials and food contact surfaces is prevented or minimized. Observe sanitation and maintenance activities taking place during operations to confirm that chemical use does not cause contamination.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage | 02.1 Conveyance Vehicles

What is the standard?

Conveyance vehicles and containers used for transport of food, ingredients or packaging materials are suitable for the intended purpose and constructed to permit effective sanitation and pest control activities. Incoming and outgoing vehicles and containers are assessed before and during unloading and loading to ensure they are suitable for the intended purpose.

What are the risks?

Food, ingredients and packaging materials can be contaminated during transportation if the conveyance vehicle or container is not suitable for the materials being transported. Conveyance vehicles or containers that are not properly constructed or cleaned can lead to a number of hazards including: physical contamination from dust and foreign material; chemical contamination from unsuitable surfaces or trace chemicals from previous loads; and biological contamination from improperly cleaned areas that can result in microbial growth.

How can you meet the standard?

- Ensure that incoming and outgoing conveyance vehicles and containers used to transport food, ingredients and packaging materials are constructed of materials that facilitate effective sanitation and pest control activities and do not present any biological, chemical or physical hazards.
- Ensure that incoming and outgoing conveyance vehicles and containers used to transport food, ingredients and packaging materials are inspected to ensure adequate cleanliness, repair, condition and suitability for the materials being transported.
- Ensure that conveyance vehicles and containers permit effective separation of incompatible foods or products where necessary during transportation.
- When tankers are used, ensure that a cleaning certificate or appropriate record (e.g. wash ticket) is provided before loading or unloading commences.
- Ensure that shipping and receiving personnel are aware of all procedures necessary to protect the safety and suitability of food.
- Where appropriate, particularly in bulk transportation, containers and conveyance vehicles are designated and marked "For Food Use Only" and are used only for that purpose.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.30

Standards of Compliance
F1.09.01.01, F1.09.01.03

Dairy:

The Milk Act (Ontario) R.R.O. 1990, Reg. 761, s.35(1); s.36(1),(2); s.39; s.44(1),(2); s.45(1)

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.18

Are you in conformance?

At pre-determined intervals, during shipping, receiving and storage, confirm that conveyance vehicles and containers are being examined for suitability for the intended purpose (e.g. cleanliness, structural condition, evidence of contamination). Ensure only personnel who have completed the Shipping, Receiving and Storage Training (T2.1) are performing conveyance vehicle and container inspections.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage |

02.2 Loading and Unloading Practices

What is the standard?

Contents of conveyance vehicles and containers are loaded, arranged and unloaded in a manner that protects the safety and suitability of food.

What are the risks?

Contamination or damage of food, ingredients and packaging materials can occur during transportation or during loading or unloading if shipping and receiving procedures are not properly followed. When loads are not properly handled, loaded or unloaded, contamination can occur from a variety of sources (e.g. forklifts can puncture holes in product containers leading to the introduction of microorganisms or physical contaminants; incompatible products can cross-contaminate each other). Damage during transportation can result in exposure of food products leading to contamination and spoilage.

How can you meet the standard?

- Ensure that food, ingredients and packaging materials are sufficiently protected, packaged securely or placed in suitable containers prior to shipping and upon delivery.
- Ensure that outgoing loads are loaded and arranged in a manner that prevents or minimizes shifting or damage during transportation.
- Ensure that outgoing loads are arranged so that incompatible products are adequately separated (e.g. raw versus cooked, food versus non-food, allergen versus non-allergen).
- Ensure that incoming materials are unloaded and stored in a manner that does not cause damage or contamination.
- Ensure that temperatures of incoming and outgoing loads are appropriate.
- Ensure that practices during loading and unloading do not damage or contaminate the food, ingredients or packaging materials.
- Ensure that chemicals are either received separately from food, ingredients and packaging materials or are received at a different location in the establishment to prevent or minimize cross-contamination.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.7; s.29

Standards of Compliance
F1.12.10.04, F1.12.10.07

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.122(1g)

Other:

N/A

Are you in conformance?

At pre-determined intervals, confirm that food, ingredients and packaging materials are being adequately protected, arranged and loaded or unloaded during shipping and receiving in a manner that prevents or minimizes damage and contamination. Ensure that only personnel who have completed the Shipping, Receiving and Storage Training (T2.1) are performing food, ingredient and packaging material loading and unloading activities.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage | 02.3 Received Products

What is the standard?

Incoming food, ingredients and packaging materials are assessed for evidence of food safety hazards and are controlled to protect their safety and suitability.

What are the risks?

Prevention of food, ingredient and packaging material contamination begins with control of incoming materials. Inadequate incoming material controls can result in product contamination, inadequate processing or misrepresentation of the product. Hazardous incoming ingredients and materials can potentially result in unsafe finished products regardless of the measures taken at the establishment. Contamination or damage of food, ingredients and packaging materials can occur during transportation.

How can you meet the standard?

- Use only sound, suitable raw materials or ingredients. Do not accept any raw material or ingredient that is known to contain parasites, undesirable microorganisms, pesticides, veterinary drugs, or toxic, decomposed or extraneous substances which would not be reduced to an acceptable level by normal sorting or processing.
- Develop incoming specifications for ingredients and packaging materials.
- Perform a visual inspection upon receipt of ingredients and packaging materials to ensure that:
 - received goods are from the intended supplier;
 - received goods have no evidence of contamination, spoilage or damage;
 - received goods are at the appropriate temperature and show no evidence of thawing; and
 - received goods match those listed on the purchase order (i.e. the correct ingredients or packaging materials were shipped).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.27(1),(2)

Standards of Compliance
F1.12.10.05, F1.12.12.01,
F1.12.12.02

Dairy:

The Milk Act (Ontario) R.R.O. 1990 O.Reg. 761.s.49(1)(2); s.50(3); s.51(1)(2)

Other:

N/A

Are you in conformance?

At pre-determined intervals, observe the receipt of incoming ingredients and packaging materials to ensure that there is no evidence of contamination or damage. Ensure that received goods are verified to be from the intended supplier and match those listed on the purchase order. Ensure only personnel who have received Shipping, Receiving and Storage Training (T2.1) are receiving loads. Review incoming specifications to ensure that the specifications are current for all products received.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage | 02.4 Shipping Conditions

What is the standard?

Food, ingredients and packaging materials are protected from contamination, damage and spoilage during shipping.

What are the risks?

If food products are not transported in an appropriately controlled environment, spoilage (e.g. microbial growth, toxin formation) can occur. Damaged product can be contaminated (e.g. foreign material, microorganisms).

How can you meet the standard?

- Ensure that temperatures of conveyance vehicles are appropriate to prevent or minimize food spoilage.
- Ensure that refrigerated conveyance vehicles are equipped with temperature measuring devices to allow temperature monitoring.
- Implement other necessary controls (e.g. humidity) as appropriate to prevent or minimize food spoilage.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.29

Standards of Compliance
F1.09.02.01, F1.09.02.02,
F1.12.10.03, F1.12.10.06

Dairy:

The Milk Act (Ontario) R.R.O.
1990. O.Reg. 761.s.122(1g)

Other:

*The Health Protection and
Promotions Act (Ontario)*
O.Reg. 562, s.11; s.28;
s.33–35

Are you in conformance?

At pre-determined intervals during receiving and shipping, confirm that transportation conditions are appropriate to prevent or minimize food spoilage. Monitor temperature measuring devices and any other controls designed to prevent or minimize spoilage.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage |

02.5 Returned and Defective Food Products

What is the standard?

Returned, defective or suspect food, ingredients and packaging materials are clearly identified, stored and controlled for food safety assessment and disposition.

What are the risks?

Returned product has left the control of the establishment and may have been subjected to improper handling (e.g. temperature abuse, poor storage conditions) causing contamination of the product. Defective or suspect product could also be contaminated. Returned and defective or suspect products that are not controlled can lead to contamination of other products.

How can you meet the standard?

- Identify, isolate and control returned, defective or suspect food products to prevent or minimize re-use or re-shipment before an appropriate examination or evaluation can be performed.
- Designate a separate area within the establishment (e.g. dry storage, cooler, freezer) for the storage of returned and defective or suspect products.
- Designate and train personnel responsible for examining and assessing returned food products and defective or suspect food products.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.27(3); s.85(1),(2),(3); s.87(1),(2),(3),(5)

Standards of Compliance
F1.12.07.02, F1.12.10.01.01,
F1.12.10.01.04, F1.12.11.01

Dairy:

The Milk Act (Ontario) R.R.O. 1990, O.Reg. 761, s.60; s.62

Other:

N/A

Are you in conformance?

At pre-determined intervals, confirm that returned, defective and suspect products are appropriately identified, isolated and controlled to prevent contamination.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage | 02.6 Allergen Control

What is the standard?

The presence of undeclared allergens in food products is prevented through control of the handling, storage and use of allergenic products and the equipment used in their processing. Rework of product(s) containing allergens is controlled. Procedures are in place to ensure that ingredient declarations list any allergens contained in the product.

What are the risks?

Allergens are substances that can cause an allergic response in certain individuals. An allergic response can range from minor skin irritation to anaphylaxis (i.e. severe allergic response). If allergen-containing ingredients and products are not controlled, contamination of non-allergen containing products can occur. A large proportion of food recalls are due to the presence of an allergenic component in a food product that is not declared on the ingredient declaration.

How can you meet the standard?

- Schedule production activities to reduce the potential of allergen cross-contamination.
- Clean and sanitize equipment between processing of allergen-containing products and non-allergen containing products.
- Designate storage and holding areas for ingredients and products that contain allergens.
- Ensure that ingredients or products that contain allergenic components are suitably identified (e.g. colour-coded containers, tags, labels).

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, confirm that handling, storage and use of allergenic ingredients and products (e.g. colour-coded containers are used, allergens are appropriately identified and controlled or separated and production schedule reduces risk of allergen contamination) reduces the potential for allergen cross-contamination.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage | 02.7 Packaging

What is the standard?

Package design and materials protect the safety and suitability of food and accommodate proper labelling.

What are the risks?

Packaging materials serve an important purpose in protecting food products from the environment. If the type of packaging (i.e. design and materials) is not suitable and adequate for the product and its environment, the product can become contaminated. If packaging materials or gases are toxic, they can compromise the safety and suitability of food. If packaging materials are intended for re-use, they must be of a design and material that permits cleaning and sanitation, where necessary, or cross-contamination can occur.

How can you meet the standard?

- Ensure that packaging materials protect the product against external contamination under the intended conditions of storage and use.
- Ensure that packaging materials, including gases, are non-toxic and do not pose a threat to the safety and suitability of food under the intended conditions of storage and use.
- Use re-usable packaging that is durable and easy to clean and sanitize.
- Ensure that packaging design and materials accommodate proper labelling.
- Ensure that packaging protects the product from damage.
- Ensure that labelling meets the requirements of the *Consumer Packaging and Labelling Act* and the *Food and Drugs Act*.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.76(1),(2)

Standards of Compliance
F1.12.09.01, F1.13.02.01,
F1.13.02.02

Dairy:

N/A

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.36; s.59

Are you in conformance?

At pre-determined intervals, review packaging design and materials to ensure they do not compromise food safety and suitability.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

02 Shipping, Receiving and Storage | 02.8 Storage Practices

What is the standard?

Food, ingredients and packaging materials are processed, handled and stored in conditions that protect their safety and suitability. Food, ingredients and packaging materials are rotated to protect their safety and suitability.

What are the risks?

If foods are not handled, processed and stored in an appropriately controlled environment, spoilage (i.e. microbial growth, toxin formation) can occur. If ingredient and food containers and packages are not protected during storage, contamination from microorganisms, chemicals and foreign material (e.g. insects, dust, wood chips) can occur. If food and ingredients are not properly rotated, they can reach their expiry date, increasing the risk to consumers. If food, ingredients and packaging materials are not properly stored and rotated, physical contamination of products can occur due to the build-up of dust and debris.

How can you meet the standard?

- To prevent or minimize contamination by microorganisms, chemicals and foreign materials, cover and protect food, ingredients and packaging materials when in storage, during transfer and when cleaning is being performed in the area.
- Store food, ingredients and packaging materials off the floor and away from the surrounding walls to prevent or minimize contamination.
- Establish procedures for the appropriate rotation of food, ingredients and packaging materials (i.e. first in, first out) to prevent or minimize food product contamination, damage or spoilage (e.g. corrosion resulting in leakage, shelf-life expiration).
- Ensure food storage facilities are designed and constructed to:
 - permit adequate maintenance and cleaning;
 - avoid pest access and harbourage; and
 - enable food to be effectively protected from contamination during storage.
- Ensure that temperatures of storage areas, process areas, coolers and freezers are appropriate to prevent or minimize food spoilage. Temperature control systems must take into account:
 - the nature of the food (e.g. water activity, pH, the initial level and types of microorganisms);
 - the intended shelf-life of the product;
 - the method of packaging and processing; and
 - how the product is intended to be used (e.g. further cooking or processing, ready-to-eat).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.13.(3); s.25; s.26

Standards of Compliance

F1.02.13.01, F1.02.13.02, F1.02.13.04, F1.05.05.02, F1.08.01.01, F1.08.01.02, F1.08.01.08, F1.08.01.09.01, F1.08.01.11, F1.08.01.13, F1.08.01.14, F1.08.02.12, F1.08.04.01, F1.08.04.02, F1.12.02.01.02, F1.12.09.04.01

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.78(1); s.81(1)(2)

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.11; s.23; s.26–29; s.37; s.42–46; s.59

Are you in conformance?

At pre-determined intervals, confirm that food, ingredients and packaging materials are properly stored to prevent or minimize contamination, spoilage and damage. Confirm that proper food, ingredient and packaging material rotation procedures are followed.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

At pre-determined intervals, monitor temperature measuring devices in refrigerated rooms to ensure temperatures are appropriate to prevent or minimize food spoilage.

Ensure that any other controls designed to prevent or minimize spoilage of food products are functioning properly and as intended. Record your observations to prove that the monitoring task was completed. Initial and date the record.

02 Shipping, Receiving and Storage | 02.9 Chemical Storage

What is the standard?

Non-ingredient chemicals and hazardous substances are stored securely and separately from food, ingredients, packaging materials and food contact surfaces. Potentially hazardous ingredients are stored in a controlled manner that ensures the safety and suitability of food.

What are the risks?

If chemicals and hazardous substances are not stored securely and separately from food, ingredients, packaging materials and food contact surfaces, contamination can occur (e.g. spillage, accidental use, leakage).

How can you meet the standard?

- Securely store chemicals and hazardous substances (i.e. water and boiler treatment chemicals, sanitation chemicals, pesticides, paints, solvents or other chemicals and hazardous substances not meant for use with food or on food contact surfaces) in a designated area to prevent or minimize cross-contamination of food, ingredients, packaging materials and food contact surfaces.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.20.(3),(4)

Standards of Compliance
F1.05.05.03.01, F1.05.05.03.04

Dairy:

N/A

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.59; s.63

Are you in conformance?

At pre-determined intervals, confirm that chemicals and hazardous substances are stored securely and separately from food, ingredients and packaging materials to prevent or minimize cross-contamination.

Record your observations to prove that the monitoring tasks were completed.
Initial and date the record.

02 Shipping, Receiving and Storage | 02.10 Waste Management

What is the standard?

Waste is handled, stored and removed in a manner that protects the safety and suitability of food.

What are the risks?

If waste is not handled and stored properly, it can contaminate food, ingredients, packaging materials or food contact surfaces (e.g. come into contact with food, harbour pests). If areas within the establishment where waste is stored or removed are not kept in a sanitary manner, personnel or equipment can cause cross-contamination (e.g. brushing against waste, having to move waste out of the way). Accumulated waste on the property surrounding the establishment can harbour pests.

How can you meet the standard?

- Ensure waste does not accumulate in food handling or storage areas or on the property surrounding the establishment.
- Provide adequate and properly protected areas and containers (e.g. containers with lids) for the storage of waste until removal.
- Ensure interior and exterior waste storage areas and containers are adequate for the amount of waste generated and cleaned often enough to avoid creating conditions that can cause cross-contamination or attract pests.
- Remove waste often enough to avoid creating conditions that can cause cross-contamination or harbour pests.
- Ensure waste removal procedures do not cause cross-contamination.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.11; s.34(2)(3)(4); s.35; s 36; s.41; s.74

Standards of Compliance

F1.02.15.01, F1.02.15.04, F1.03.01.02, F1.03.02.01, F1.03.03.01.01, F1.12.07.01

Dairy:

N/A

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.20; s.57; s.59

Are you in conformance?

At pre-determined intervals, confirm that the handling and storage of waste does not lead to contamination of food, ingredients, packaging materials or food contact surfaces. Confirm that waste storage areas and containers are clean, tidy and adequate for the amount of waste being generated.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

03 Sanitation | 03.1 Cleaning and Sanitizing

What is the standard?

Cleaning and sanitizing procedures are being performed as written in the Sanitation Program (P3.1) to protect the safety and suitability of food.

What are the risks?

If cleaning and sanitizing procedures are not performed as written in the Sanitation Program (P3.1), improper or inadequate sanitation can result. Inadequate sanitation can lead to contamination of food, ingredients, packaging materials and food contact surfaces. Improper chemical concentrations, application or rinsing procedures can lead to chemical (e.g. chemical residues due to poor rinsing, no-rinse chemicals in excess of approved concentration) and biological contamination (e.g. bacteria not effectively removed from food contact surfaces). Contamination can also be caused by allergens that are not effectively removed from food contact surfaces or by cross-contamination from cleaning activities during operation.

How can you meet the standard?

- Confirm that cleaning and sanitizing procedures are followed as written in the Sanitation Program (P3.1) to ensure that equipment and all parts of the establishment are properly cleaned and sanitized to prevent or minimize contamination.
- Ensure that sanitation personnel are aware of all sanitation procedures necessary to maintain the safety and suitability of food.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.19.(2)

Standards of Compliance

F1.02.08.05, F1.02.11.02, F1.04.05.02, F1.05.02.01, F1.12.04.06.02, F1.12.09.02.03, F1.12.09.03.03, F1.12.09.04.03, F1.12.09.05.02

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.39; s.41; s.86

Other:

N/A

Are you in conformance?

At pre-determined intervals, observe sanitation activities in progress to ensure that activities are being performed as written in the sanitation manual (e.g. correct sequence of steps and chemicals; correct water temperature, volume and pressure). Ensure that sanitation activities are effective by performing an inspection or effectiveness test (e.g. swab). Ensure that all personnel performing sanitation activities have completed the Sanitation Training (T3.1).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

03 Sanitation | 03.2 Pre-operational Assessment

What is the standard?

Operations begin only after a pre-operational assessment to evaluate the suitability of the environment for food processing and handling has been completed with satisfactory results. When sanitation activities are required during operations, a pre-operational assessment is conducted before resuming operations.

What are the risks?

If a pre-operational inspection is not performed before operations begin, inadequate or improper sanitation may not be detected. Inadequate sanitation can lead to contamination of food, ingredients, packaging materials and food contact surfaces. Improper chemical concentrations, application or rinsing procedures can lead to both chemical (e.g. chemical residues due to poor rinsing, no-rinse chemicals in excess of approved concentration) and biological contamination (e.g. bacteria not effectively removed from food contact surfaces). Contamination can also be caused by allergens that are not effectively removed from food contact surfaces or by cross-contamination from cleaning activities during operation.

How can you meet the standard?

- Ensure designated personnel follow inspection procedures set out in the sanitation manual for inspection of equipment and rooms prior to commencement of operations and where applicable, before resuming operations. Inspection procedures confirm that equipment and rooms are visibly clean (i.e. free of food, residues, filth) and, where appropriate, sanitized.
- Consider including pest control, temperature control and equipment maintenance in your pre-operational assessment.

Which regulations apply to this standard?

Meat & Poultry:
N/A

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, confirm that pre-operational inspections are being performed as required. Ensure that all personnel performing pre-operational inspections have completed the Sanitation Training (T3.1).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

04 Equipment Maintenance |

04.1 Preventive Maintenance and Calibration Monitoring

What is the standard?

Preventive maintenance and calibration procedures are performed as written in the Preventive Maintenance Calibration Program (P4.1) to protect the safety and suitability of food.

What are the risks?

If preventive maintenance and calibration procedures are not performed as written in the Preventive Maintenance and Calibration Program (P4.1), food, ingredients and packaging materials can be contaminated. Deteriorating or poorly maintained equipment (e.g. pitted, cracked) can present physical hazards (e.g. flaking metal, nuts, bolts) or provide areas for bacterial growth. Over-lubrication of equipment can cause chemical contamination. Equipment and devices used to measure parameters that have an impact on food safety must be properly calibrated. If equipment and measuring devices used to monitor critical steps in the manufacturing process (e.g. pH, water activity, cooking temperature, concentration of restricted ingredients, metal detection) are not accurate, food safety hazards can result (e.g. inaccurate thermometers will result in a bacterial hazard).

How can you meet the standard?

- Perform preventive maintenance and calibration procedures as written in the Preventive Maintenance and Calibration Program (P4.1).
- Ensure preventive maintenance and calibration personnel receive the training necessary to protect the safety and suitability of food.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.06.02.01.02, F1.06.02.01.03,
F1.06.02.01.04, F1.06.02.02,
F1.06.02.04.01

Dairy:

N/A

Other:

*The Health Protection and
Promotions Act (Ontario)*
O.Reg. 562, s.47; s.49

Are you in conformance?

At pre-determined intervals, ensure that preventive maintenance and calibration procedures are performed as written in the Preventive Maintenance and Calibration Program (P4.1). Ensure preventive maintenance and calibration procedures are only performed by personnel who have received Preventive Maintenance and Calibration Training (T4.1).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

05 Pest Control | 05.1 Pest Control Monitoring

What is the standard?

Pest control procedures are performed as written in the Pest Control Program (P5.1) to protect the safety and suitability of food.

What are the risks?

If pest control procedures are not performed as written in the Pest Control Program (P5.1), pests can contaminate food, ingredients, packaging materials and food contact surfaces. Pests in or around an establishment can lead to contamination from droppings, larvae and dead insects or animals or their parts.

How can you meet the standard?

- Pest control activities are followed as written in the Pest Control Program (P5.1) to ensure that all parts of the establishment are free of pests.
- Pest control personnel are aware of all pest control procedures (e.g. licensed to handle and apply pesticides) necessary to maintain the safety and suitability of food.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.21

Standards of Compliance
F1.07.01.02

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.77(1f)

Other:

N/A

Are you in conformance?

At pre-determined intervals, ensure that pest control activities are being performed as written in the pest control manual (e.g. correct pesticides used, traps properly serviced). Ensure only personnel who meet the requirements of the Pest Control Training (T5.1) are performing pest control activities.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

06 Recall | 06.1 Product Code/Labeling Monitoring

What is the standard?

Food products stored within or shipped from the establishment are correctly labelled and coded with a lot code or production identifier.

What are the risks?

Control of labelling is important to ensure that the correct label is applied to each food product. Incorrect labels could be misleading and cause potential health hazards to consumers who are allergic to ingredients within the mislabelled food product. Incorrectly coded expiry dates can result in consumers storing the product past the intended shelf life, leading to potential spoilage. Incorrect labelling or coding can make product recall difficult or unfeasible if a hazard is associated with the mislabelled or miscoded product.

How can you meet the standard?

- Ensure all products are labelled correctly and the label accurately represents the product packaged (e.g. includes declaration of all ingredients, contains all information as required by the *Consumer Packaging and Labelling Act* and regulations).
- Ensure food products are accompanied by, or bear, adequate information and instructions to enable the next person in the food supply chain to handle, display, store, prepare and use the product safely and correctly.
- Implement procedures to ensure proper label use (e.g. tops and bottoms of label bundles are visually checked before use).
- Implement a system of identification and storage of different label types.
- Ensure all finished products are correctly coded (e.g. including production date, expiry date, lot).
- Create a description of lot code and production identifiers and include it in the Recall Program described in P6.1.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.75; s.77; s.78; s.79; s.80

Standards of Compliance

F1.02.13.06, F1.12.12.09, F1.14.02.01, F1.14.02.02, F1.14.02.03, F1.14.02.04, F1.14.02.05

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.127(2), O.Reg. 753.s.9

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.36; s.40; s.52

Are you in conformance?

At pre-determined intervals, observe labelling and coding activities to ensure that the product is being properly labelled and coded. Ensure recall personnel have received Recall Training (T6.1).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

07 Water Safety | 07.1 Water Treatment Monitoring

What is the standard?

Water treatment activities are performed as written in the Water Treatment Program (P7.1) to protect the safety and suitability of food.

What are the risks?

If water treatment activities are not performed as written in the Water Treatment Program (P7.1), the water supply can become contaminated (e.g. presence of microorganisms, excess chemical levels). Since water, ice and steam can be used for a variety of purposes (e.g. sanitation, hand washing, ingredient, processing aid), non-potable water can transfer contaminants (e.g. *E. coli*) to food, ingredients, food contact surfaces and personnel. Treated water (e.g. boiler, water, chlorinated water, flume water) can present a source of contaminants if the chemical treatment or treatment process is incorrectly performed.

How can you meet the standard?

- Perform water treatment activities as written in the Water Treatment Program (P7.1) to ensure that establishment water supply is potable and free of contaminants.
- Ensure water treatment personnel are capable of performing the necessary activities.

Which regulations apply to this standard?

Meat & Poultry:

Standards of Compliance
F1.04.02.01, F1.04.02.02.01

Dairy:

N/A

Other:

N/A

Are you in conformance?

At pre-determined intervals, ensure that water treatment activities are being performed as written in the Water Treatment Program (P7.1) (e.g. proper chemicals used, correct frequency of treatment). Ensure water treatment personnel have received Water Treatment Training (T7.1).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

07 Water Safety | 07.2 Water Safety Monitoring

What is the standard?

Water safety monitoring activities are performed as written in the Water Safety Monitoring Program (P7.2) to protect the safety and suitability of food.

What are the risks?

If water safety monitoring activities are not performed as written in the Water Safety Monitoring Program (P7.2) contaminants may not be detected. Since water, ice and steam can be used for a variety of purposes (e.g. sanitation, hand washing, ingredient, processing aid), non-potable water can transfer contaminants (e.g. *E. coli*) to food, ingredients, food contact surfaces and personnel. Treated water (e.g. boiler water, chlorinated water, flume water) can present a source of contaminants if the chemical treatment or treatment process is incorrectly performed.

How can you meet the standard?

- Ensure that water safety monitoring activities are followed as written in the Water Safety Monitoring Program (P7.2) to ensure that the establishment water supply is potable and free of contaminants.
- Ensure that personnel responsible for the delivery of the Water Safety Monitoring Program (P7.2) have been adequately trained.
- Ensure that sampling and testing personnel are capable of performing the necessary activities.

Which regulations apply to this standard?

Meat & Poultry:
Standards of Compliance
F1.04.01.02, F1.04.02.02.02,
F1.04.05.01

Dairy:
N/A

Other:
N/A

Are you in conformance?

At pre-determined intervals, confirm that water safety monitoring activities are being performed as written in the Water Safety Monitoring Program (P7.2) (e.g. results are reviewed to ensure that the water source continues to be potable, proper sample sites tested). Ensure water safety monitoring personnel have received Water Safety Monitoring Training (T7.2).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

Environmental Controls

	E1 Establishment Location and Construction
61	E1.1 Property and Surroundings
62	E1.2 Building Exterior
	E2 Establishment Design
63	E2.1 Cross-contamination Control
64	E2.2 Personnel Facilities
	E3 Establishment Interior
65	E3.1 Internal Structures and Fittings
66	E3.2 Lighting
67	E3.3 Lighting Fixtures
68	E3.4 Air Quality and Ventilation
69	E3.5 Drainage and Sewage Systems
	E4 Equipment
70	E4.1 Equipment Design, Construction and Installation
71	E4.2 Waste Containers and Utensils
72	E4.3 Hand-washing Stations
	E5 Water Supply
73	E5.1 Adequate Supply and Protection of Water, Ice and Steam

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E1 Establishment Location and Construction

E1.1 Property and Surroundings

What is the standard?

The establishment is located away from or protected against potential sources of external contaminants that may compromise the safety and suitability of food. Areas surrounding the establishment are maintained to prevent or minimize harbourage of pests and contaminants.

What are the risks?

Outside sources of contamination (e.g. excessive dust, foul odours, smoke, pest infestations, airborne microbial and chemical contaminants) can lead to contamination within an establishment. Water that accumulates around the establishment provides an ideal environment for growth of microorganisms.

How can you meet the standard?

- Locate the establishment in an area that is free from sources of external contaminants that may impact on food safety or suitability (e.g. airborne contaminants), or put sufficient controls in place and maintain them. In particular, locate the establishment away from, or protect it against:
 - environmentally polluted areas and industrial activities that pose a serious threat of contaminating food;
 - areas subject to flooding unless sufficient safeguards are provided;
 - areas prone to infestations of pests; and
 - areas where wastes, either solid or liquid, cannot be removed effectively.
- Take reasonable measures to protect food, ingredients, packaging materials and food contact surfaces from external contaminants.
- Store waste and garbage outside in a manner, and remove at intervals, that minimize potential for contamination and harbourage of pests (e.g. pest-proof containers).
- Do not store equipment and other items on the property surrounding the establishment unless controls are in place to allow for adequate property maintenance (e.g. designated storage location, property maintenance activity schedule).
- Ensure establishment surroundings and property are neat, tidy and well-kept (e.g. shrubs are pruned, litter is removed).
- Ensure establishment surroundings and property are provided with adequate drainage to prevent or minimize pooling water.
- Store potential food sources for pests in pest-proof containers or stack them above the ground away from walls.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.5(1),(2); s.19(1)

Standards of Compliance
F1.02.01.01, F1.02.01.02

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.97(1)

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.11; s.26

Are you in conformance?

At pre-determined intervals, confirm that the establishment is protected from potential sources of external contaminants that could pose a threat to food safety or suitability (e.g. the property surrounding the establishment is free from pooling water, no pest harbourage, free of litter).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E1 Establishment Location and Construction

E1.2 Building Exterior

What is the standard?

Establishment exterior is structurally complete and suitable for the operations taking place within. Establishment exterior is protected against entry or harbourage of pests as well as entry of external contaminants.

What are the risks?

If an establishment is constructed of materials that are not durable and suitable for establishment operations, contaminants can enter into the establishment. Inadequate or poor establishment conditions can create the potential for hazards that compromise activities performed in the establishment (e.g. damaged roof can lead to entry of rainwater or pests).

How can you meet the standard?

- Design and construct the establishment so that the internal environment is protected from external contaminants.
- Ensure the establishment (e.g. walls, roof) is of a sound construction and is maintained in good repair (e.g. no evidence of damage).
- Take steps to prevent or minimize the entrance and harbourage of pests, insects and contaminants (e.g. no holes or unprotected openings, weather stripping on exterior doors).
- Cover air intakes and openings or equip them with appropriate screens.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.5(3),(4); s.20.(5)

Standards of Compliance
F1.02.01.03, F1.02.12.02,
F1.07.02.01.01

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.77(1)

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.11; s.26

Are you in conformance?

At pre-determined intervals, check the establishment exterior for conditions that may lead to contamination of food, ingredients, packaging materials or food contact surfaces.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E2 Establishment Design | E2.1 Cross-contamination Control

What is the standard?

Establishment design or operational controls permit hygienic activities, including protection against cross-contamination of food, ingredients, packaging materials and food contact surfaces.

What are the risks?

If an establishment lacks adequate separation between incompatible activities, cross-contamination can occur. Inadequate separation can lead to microbiological contamination (e.g. ready-to-eat product contaminated by raw product, finished product contaminated by waste) or chemical contamination (e.g. allergens).

How can you meet the standard?

- Separate operations that have the potential to cause cross-contamination by physical partition, by work area designation, by designated equipment or by other effective means.
- Develop a drawing or blueprint that identifies the activities performed in each area (e.g. cooler room, equipment wash-up room, raw preparation room). Include traffic patterns of personnel, food, ingredients, packaging materials, chemicals and waste material.
- Identify areas where cross-contamination may occur (e.g. unclean raw vegetables versus processed vegetables, cooked foods versus raw foods, edible food versus waste) and establish controls (e.g. physical separation or operational separation) where necessary to prevent or minimize cross-contamination.
- Locate personnel facilities to prevent or minimize contamination of food processing and handling areas.
- Construct or designate appropriate areas of the establishment to be used solely for production of certain product types (e.g. raw, cooked, allergenic products) or certain activities (e.g. cleaning of utensils).
- Schedule production activities to prevent or minimize the potential for cross-contamination (e.g. raw product following cooked product, allergenic products following non-allergenic products).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.6.(4); s.14(2); s.15(2)

Standards of Compliance

F1.02.02.01, F1.02.02.02, F1.02.05.01, F1.02.05.03, F1.02.12.01, F1.02.13.03, F1.02.15.01.01, F1.03.04.01, F1.08.01.09.03, F1.08.01.10, F1.08.02.10.01, F1.08.02.11, F1.11.01.01, F1.11.01.03.01, F1.11.02.04, F1.11.01.05, F1.12.09.05.01, F1.12.15.02, F1.12.15.08, F1.12.16.02, F1.12.17.02, F1.12.18.09

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.77(1)

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.11; s.12; s.26–28

Are you in conformance?

At pre-determined intervals, confirm that operations having the potential to cause cross-contamination are physically segregated, separated by operational controls or other effective means.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E2 Establishment Design | E2.2 Personnel Facilities

What is the standard?

Washrooms, change rooms and lunch and break area(s) are provided and maintained to ensure that personal hygiene can be maintained to protect the safety and suitability of food. Washrooms are equipped with adequate lighting and an adequate number of flush toilets and hand-washing stations; are free of condensation, excess moisture or odours; and are designed to prevent or minimize contamination.

What are the risks?

If adequate washrooms, change rooms and lunchrooms are not available, then contamination can occur. Inadequate washroom facilities can lead to microbial contamination due to poor personal hygiene. Lack of an acceptable area to change into work clothes will allow exterior contaminants to enter the establishment (e.g. microorganisms on street clothes). Eating or drinking in production areas can lead to contamination from the product being consumed. Poor maintenance of washrooms, change rooms and lunchrooms can lead to contaminants entering production and storage areas.

How can you meet the standard?

- Ensure establishment is provided with washrooms, change rooms, lunchrooms and other necessary personal welfare areas, adequate for the number of personnel and their activities.
- Provide enough flush toilets and hand-washing stations to accommodate the number of personnel working at the establishment.
- Equip washrooms with lighting to facilitate sanitary procedures and ventilation to effectively remove odours.
- Ensure washrooms, change rooms and lunchrooms are designed and maintained in good repair to prevent or minimize contamination of food, ingredients, packaging material or food contact surfaces.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.9 (1),(3)

Standards of Compliance

F1.02.10.01, F1.02.10.02, F1.02.10.04, F1.02.10.05, F1.02.10.06, F1.02.10.07, F1.02.10.08

Dairy:

N/A

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.20; s.68; s.69

Are you in conformance?

At pre-determined intervals, confirm washrooms, change rooms and lunchrooms are adequate for the number of personnel, properly equipped and maintained in good repair.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E3 Establishment Interior | E3.1 Internal Structures and Fittings

What is the standard?

Internal rooms, structures and fittings are suitable and are maintained for the operations taking place within. Floors, walls, ceilings, overheads, doors, windows, stairs and other structures are cleanable, properly maintained, exhibit no evidence of degradation that would cause contamination and are suitable for the activities in each area. The condition of internal rooms, structures and fittings protects the safety and suitability of food.

What are the risks?

Materials with the potential to cause biological, chemical or physical hazards should not be used in the construction of the inside of the establishment. Materials that cannot be effectively cleaned can contribute to the development of unsanitary conditions (e.g. presence of microorganisms, mould). Materials that are not durable or suitable for the conditions or activities in the area can deteriorate resulting in unsuitable conditions (e.g. flaking, peeling, rust, loose materials).

How can you meet the standard?

- Ensure internal structures, surfaces and fittings (e.g. ceilings, door, walls) are of a construction and condition that does not present biological, chemical or physical hazards to food, ingredients, packaging materials or food contact surfaces (e.g. no flaking paint, rust, corrosion, accumulation of food residue, dust, mould).
 - working surfaces that come into direct contact with food are in a sound condition, and are easy to clean, maintain and sanitize; and
 - working surfaces that come in direct contact with food are made of smooth, non-absorbent materials, and are inert to food, detergents and sanitizers under normal operating conditions.
- Ensure internal structures, surfaces and fittings (e.g. ceilings, doors, walls) can be cleaned and, where appropriate, sanitized.
- In particular, ensure the interior of the establishment meets the following conditions where necessary to protect the safety and suitability of food:
 - the surfaces of walls, partitions and floors are made of materials that do not have a toxic effect when used as intended;
 - walls and partitions have a smooth surface;
 - floors are constructed to allow adequate draining and cleaning;
 - ceilings and overhead fixtures are constructed and finished to minimize the build-up of dirt, condensation and the shedding of particles;
 - windows are easy to clean and constructed to minimize the build-up of dirt;
 - where necessary, windows are fixed in place;
 - doors have smooth, non-absorbent surfaces, are easy to clean and sanitize;
- Windows are sealed or equipped with close-fitting, cleanable screens to prevent or minimize the entry of pests.
- Windows are protected or constructed of unbreakable materials in areas where breakage can contaminate food, ingredients, packaging materials and food contact surfaces.
- Doors are constructed to prevent or minimize the entry of pests (e.g. self-closing).
- Internal structures are constructed of materials listed in the “Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products,” published by the Canadian Food Inspection Agency, or the manufacturer has a letter of no objection from Health Canada.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.6.(1); s.9(1),(2); s.13(1); s.20(1)(2)

Standards of Compliance
F1.02.03.01, F1.02.03.02,
F1.02.03.04, F1.02.14.02,
F1.02.15.02

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.77(1)

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.11; s.22; s.23; s.59

Are you in conformance?

At pre-determined intervals, confirm that materials used in the construction of the interior of the establishment (e.g. floors, walls, ceilings, overhead structures, windows, doors, stairs) do not present a source of contaminants, are in a good state of repair and are cleanable and suitable for the activity of the room.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E3 Establishment Interior | E3.2 Lighting

What is the standard?

The establishment has appropriate lighting to facilitate all activities including processing, inspection, cleaning and sanitizing, and maintenance. Lighting is of a design and type that does not contribute to a misleading assessment of food.

What are the risks?

If lighting levels are not adequate for the inspection of food or if the light source changes the natural colour of food, then an incorrect assessment of the appearance of the food may result. If lighting levels are not adequate to perform required tasks (e.g. cleaning and maintenance of equipment), this can create the potential for biological, chemical or physical contamination.

How can you meet the standard?

- Ensure lighting levels are adequate to properly complete the tasks performed in each area (e.g. product inspection, sanitation, maintenance, visual examination of rooms).
- Ensure light sources do not alter the natural colour or appearance of food where food assessments are performed.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.6.(2),(5)

Standards of Compliance
F1.02.04.01.01, F1.02.04.03

Dairy:

N/A

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.13

Are you in conformance?

At pre-determined intervals, confirm that lighting levels are of an adequate intensity for the tasks performed in each area. Confirm that lighting does not alter the natural colour of food where an assessment is necessary.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E3 Establishment Interior | E3.3 Lighting Fixtures

What is the standard?

Light bulbs and lighting fixtures in areas of exposed food, ingredients, packaging materials or food contact surfaces are equipped with shatterproof bulbs or breakage shields to prevent or minimize contamination of food if breakage occurs.

What are the risks?

If a light bulb or lighting fixture breaks over exposed food, ingredients, packaging materials or food contact surfaces, then a physical hazard can occur.

How can you meet the standard?

- Equip light fixtures and light bulbs suspended over food, ingredients, packaging materials and food contact surfaces with shatterproof bulbs or coverings to prevent or minimize physical contamination in case of breakage.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.6.(3)

Standards of Compliance
F1.02.04.02

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.77(1)

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.11; s.18; s.26

Are you in conformance?

At pre-determined intervals, confirm that light bulbs and lighting fixtures are protected in areas of exposed food, ingredients, packaging materials and food contact surfaces. Confirm that the light bulbs and fixtures continue to be in a good state of repair.

Record your observations to prove that the monitoring task was completed. Initial and date the record.

E3 Establishment Interior | E3.4 Air Quality and Ventilation

What is the standard?

The establishment has and uses ventilation to keep rooms free of excessive heat, humidity, steam, vapours, smoke, particulates and condensation. Ventilation openings have screens or filters that can be easily cleaned or changed. Ventilation systems do not permit air to flow from contaminated areas to clean areas.

What are the risks?

Unclean air (e.g. containing bacteria, dust, odours, condensation) supplied to the establishment is a potential source of contaminants. Inadequate ventilation may lead to the formation of condensation, which can be a source of bacterial contaminants. The flow of contaminated air through an establishment can also be a source of bacterial contaminants.

How can you meet the standard?

- Ensure the establishment is provided with adequate ventilation to enable sufficient air exchange to maintain a clean air supply and remove contaminated air. In particular, adequate natural or mechanical ventilation is provided to:
 - minimize airborne contamination of food (e.g. from aerosols or condensation droplets);
 - control ambient temperatures;
 - control odours which might affect the suitability of food; and
 - control humidity, where necessary, to ensure the safety and suitability of food.
- Install and maintain equipment requiring ventilation in a manner that ensures removal of humidity, steam vapours, smoke and odours.
- Design and construct ventilation systems so that air does not flow from contaminated areas to clean areas.
- Ensure that the ventilation system can be maintained and cleaned where necessary.
- Ensure that filters and similar devices are easily removed for cleaning and replacement or designed to be cleaned in place.
- Change or clean filters and similar devices often enough to maintain a clean air supply.
- Ensure that the establishment's air supply minimizes airborne contaminants.
- Where necessary, exhaust equipment to the outside to prevent excessive condensation.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.6.(2); s.19(8); s.25.(6)

Standards of Compliance F1.02.04.01.02, F1.08.01.03, F1.08.02.01, F1.11.03.02, F1.11.03.03, F1.12.15.01.03

Dairy:

The Milk Act (Ontario) R.R.O. 1990. O.Reg. 761.s.77(1)

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.11; s.15; s.26–28

Are you in conformance?

At pre-determined intervals, confirm that the ventilation system is adequate for the activities within the establishment.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E3 Establishment Interior | E3.5 Drainage and Sewage Systems

What is the standard?

The establishment has and uses drainage and liquid waste disposal systems that are maintained to protect the safety and suitability of food and the potable water supply. Drainage and liquid disposal systems are equipped with back-flow preventers and no cross-connections exist with drainage or waste systems and potable water lines. Pooling of water and liquids is prevented or addressed.

What are the risks?

Inadequate drainage or liquid waste disposal systems can lead to cross-contamination of food, ingredients, packaging materials, food contact surfaces or the potable water supply (e.g. drain back-ups leading to flooding). Without mechanisms to prevent backflow (e.g. trapping, venting), sewer gases, pests, microorganisms or other contaminants can enter the establishment through the plumbing. Contamination of floor drains increases the possibility of contamination of the establishment interior. Pooling liquid waste provides an excellent environment for the growth of microorganisms, which can be transferred through the establishment (e.g. on boots, equipment, hoses). Cross-connections between potable and non-potable plumbing systems can contaminate the potable water supply.

How can you meet the standard?

- Design the drainage or liquid waste disposal system in the establishment to prevent cross-contamination of food, ingredients, packaging materials, food contact surfaces or the potable water supply.
- Equip drainage and liquid waste disposal systems with appropriate mechanisms to prevent back-flow.
- Ensure that there are no cross-connections between potable and non-potable water supplies.
- Ensure that drainage or operational controls (e.g. mopping) are adequate to prevent or address pooling liquids on floors.
- Ensure that drains, drain covers and drain traps are cleaned and sanitized regularly.
- Control effluent and sewage lines passing directly over or through production areas to prevent contamination.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O. Reg. 632/92, s.11.(1),(2)

Standards of Compliance
F1.02.04.04, F1.02.08.01.02,
F1.03.01.05, F1.04.04.01,
F1.07.02.01.02, F1.08.02.10.03

Dairy:

The Milk Act (Ontario) R.R.O.
1990. O.Reg. 761.s.77(1);
s.97(2)

Other:

*The Health Protection and
Promotions Act (Ontario)*
O.Reg. 562, s.11

Are you in conformance?

At pre-determined intervals, confirm that the drainage and liquid waste disposal systems do not present a source of contaminants to food, ingredients, packaging materials, food contact surfaces or the potable water supply (e.g. liquids are not accumulating, back-flow preventers are operating effectively). Confirm that plumbing lines that pass directly over or through production and storage areas are maintained or controlled to prevent contamination.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E4 Equipment | E4.1 Equipment Design, Construction and Installation

What is the standard?

Equipment and utensils that may impact on food safety are constructed of non-toxic materials, exhibit no signs of degradation that could contaminate food, and are easy to clean, sanitize and maintain. Equipment design, location, construction and installation promote effective assessment, maintenance, and cleaning and sanitizing activities. Adequate equipment or facilities are available for the activities conducted to protect the safety and suitability of food. Equipment functions in accordance with its intended use.

What are the risks?

Poorly constructed or maintained equipment can create the potential for biological, chemical and physical hazards. Pits, cracks and crevices can provide areas for residues to accumulate and microorganisms to grow. Food products that accumulate can contain allergenic components that can cause cross-contamination. Poorly constructed or maintained equipment can contaminate food products with physical hazards (e.g. metal fragments). Poor installation of equipment can lead to parts or areas that cannot be properly cleaned, sanitized or inspected. Equipment that cannot be adequately inspected can lead to hazards not being detected. Equipment food contact surfaces that are not suitable for the activities being performed can impart hazards to the products (e.g. chemical leaching from plastics, lead). Equipment that does not function as intended can produce an unsafe product (e.g. inadequate heat treatment).

How can you meet the standard?

- Use equipment designed and constructed in a manner that will not pose biological, chemical or physical hazards to food, ingredients or packaging materials.
- Use equipment constructed to be easily cleaned, sanitized and inspected (e.g. no pits, crevices, poor welds).
- Use equipment designed and installed to achieve the intended purpose and ensure food safety and suitability (e.g. having the equipment properly mounted or ensuring it is vented or drained, having back-flow preventers or conducting a heat distribution test).
- Ensure equipment and facilities are adequate for the activities conducted (e.g. heating, cooling, cooking, refrigerating or freezing the volume of product handled).
- Ensure suitable detection or screening devices are in place where necessary.
- Install equipment in a manner that facilitates cleaning, inspection and maintenance.
- Ensure food contact surfaces are made of smooth, non-absorbent materials, and are inert to food, detergents and sanitizers under normal operating conditions.
- Design equipment that may impact on food safety to allow monitoring and control of parameters such as temperature, humidity, air flow and any other characteristics likely to have an effect on the safety and suitability of food. These requirements are intended to ensure that:
 - harmful or undesirable microorganisms and their toxins are eliminated or reduced to safe levels or their survival and growth are effectively controlled;
 - where appropriate, critical limits established in HACCP plans can be monitored; and
 - temperature and other conditions necessary to food safety and suitability can be rapidly achieved and maintained.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.12; s13.(1),(2),(4); s.19(7)

Standards of Compliance

F1.02.06.02.01, F1.02.06.04, F1.02.06.05, F1.02.06.06, F1.02.07.01, F1.02.07.02, F1.02.07.03, F1.02.07.05, F1.02.07.07, F1.02.07.08, F1.02.07.09, F1.02.11.01, F1.06.01.01, F1.06.01.02, F1.06.02.01.01, F1.08.01.15, F1.08.02.04.01, F1.08.02.04.04, F1.12.11.02, F1.12.14.01, F1.12.15.01.01, F1.12.16.01, F1.12.16.06, F1.12.17.01, F1.12.17.05, F1.13.01.01

Dairy:

The Milk Act (Ontario) R.R.O.1990, O.Reg.761, s.40; s.79(1),(2),(3)

Other:

The Health Protection and Promotions Act (Ontario) O.Reg. 562, s.11; s.18; s.19; s.24; s.26–29; s.56; s.58; s.61–63; s.69; s.71–82

Are you in conformance?

At pre-determined intervals, inspect all equipment to ensure that it does not present a hazard to food and that surfaces can be cleaned, sanitized, inspected and maintained.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E4 Equipment | E4.2 Waste Containers and Utensils

What is the standard?

Containers and utensils used for collection and holding of waste and inedible or hazardous substances are clearly identified, function properly, exhibit no signs of degradation that could lead to the contamination of food and can be cleaned and maintained. Containers and utensils are cleaned prior to entering food processing, handling or storage areas.

What are the risks?

If containers and utensils used for waste materials are not clearly identified, this can result in container misuse (e.g. edible food products being held in a garbage container), and cause cross-contamination. If containers and utensils used for waste storage and handling are not designed and constructed to prevent or minimize contamination (e.g. prevent leakage), waste can leak or fall out and contaminate food products (e.g. via personnel or equipment). If containers and utensils used for waste are not of a design and construction that allows for cleaning, then they can be a source of contaminants when returned to food processing or storage areas.

How can you meet the standard?

- Clearly identify containers and utensils used for collection and holding of waste (e.g. colour code designations, legible marking).
- Ensure containers and utensils used for the collection and holding of waste are constructed of materials that are cleanable, suitable and maintained for the intended purpose.
- Ensure that, where appropriate, containers are made of durable material, are leak-proof and do not present a source of contaminants to food, ingredients, packaging materials or food contact surfaces.
- Use containers and utensils that allow for cleaning and maintenance.
- Ensure waste containers are protected to prevent or minimize contamination of food handling and storage areas (e.g. equipment with lids, protected to prevent spillage, adequate size).
- Ensure containers and utensils used for waste are cleaned before they are moved into handling or storage areas.
- Where appropriate, use lockable containers to prevent malicious or accidental contamination of food.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.13.(4); s.34(1)

Standards of Compliance
F1.02.15.05, F1.03.02.04

Dairy:

N/A

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.20; s.57

Are you in conformance?

At pre-determined intervals, confirm that containers and utensils used for waste do not present a source of contaminants to food, ingredients, packaging materials or food contact surfaces (e.g. clearly identified, sound condition, cleaned as needed).

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E4 Equipment | E4.3 Hand-washing Stations

What is the standard?

An adequate number of conveniently located and readily accessible hand-washing stations are provided in areas where exposed food, ingredients and packaging materials are processed or handled, and in washrooms and other locations necessary to prevent or minimize contamination. Hand-washing stations are properly installed and maintained and are provided with warm potable water, soap, a hygienic drying apparatus and a cleanable waste receptacle.

What are the risks?

Personnel are a major source of contaminants. Adequate and frequent washing has been shown to reduce the level of microorganisms on personnel and the products they handle. If there are not enough hand-washing stations or they are located in areas that are difficult to access, personnel are less likely to wash their hands. If hand-washing stations are not provided with adequate supplies, hand-washing activities may not be effective. Hand-washing stations can become a source of contaminants if they are not properly constructed and maintained (e.g. hands-free, used only for hand-washing purposes, cleaned).

How can you meet the standard?

- Provide areas where food is processed or handled with an adequate number of conveniently located hand-washing stations for the number of personnel and the activities performed.
- Ensure washrooms have an adequate number of hand-washing stations for the number of personnel.
- Ensure hand-washing stations do not present a source of contaminants to personnel (e.g. are hands-free).
- Provide hand-washing stations with:
 - soap;
 - warm potable water;
 - hygienic drying apparatus; and
 - durable and cleanable waste receptacles.
- Ensure hand-washing stations are not used for any purpose other than hand washing (e.g. washing of utensils).
- Where appropriate, provide facilities for hand disinfection.

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.9.(1)

Standards of Compliance
F1.02.06.02.04, F1.02.09.01,
F1.02.09.02, F1.02.09.03,
F1.02.09.04, F1.02.09.05,
F1.02.09.06

Dairy:

The Milk Act (Ontario) R.R.O.
1990. O.Reg. 761.s.78(1)

Other:

*The Health Protection and
Promotions Act (Ontario)*
O.Reg. 562, s.20; s.68; s.69

Are you in conformance?

At pre-determined intervals, confirm that there are an adequate number of conveniently located hand-washing stations for the number of personnel and the activities performed. Confirm that hand-washing stations are provided with warm potable water, soap, and a hygienic drying apparatus and a cleanable waste receptacle. Confirm that hand-washing stations do not present a source of contamination and are used only for the intended purpose.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

E5 Water Supply |

E5.1 Adequate Supply and Protection of Water, Ice and Steam

What is the standard?

Potable water, ice and steam are supplied at volumes, pressures and temperatures necessary for all sanitation and operational activities. Appropriate facilities for water storage, treatment, distribution and temperature control are available to protect the safety and suitability of food.

What are the risks?

If water, ice and steam are not supplied at the necessary volumes, pressures and temperatures, the ability to properly complete certain activities can be compromised (e.g. hand washing, sanitation, product rinsing). A lack of sufficient volumes, pressures or temperatures can lead to contamination.

How can you meet the standard?

- Ensure that the necessary volumes, pressures and temperatures of water, ice and steam are provided for all sanitation and operational activities including:
 - chemical mixing and application;
 - hand-washing activities;
 - processing (product rinsing);
 - equipment rinsing; and
 - use as an ingredient.
- Ensure that non-potable water (e.g. for use in fire control) has a separate storage and distribution system.
- Ensure that non-potable water systems are identified and do not connect with, or allow reflux into, potable water systems (e.g. vacuum breaks, back-flow preventers).

Which regulations apply to this standard?

Meat & Poultry:

The Meat Inspection Act (Ontario) O.Reg. 632/92, s.10

Standards of Compliance
F1.02.08.01.01, F1.02.08.06,
F1.04.01.01, F1.04.03.01,
F1.04.04.02, F1.08.02.05,
F1.08.02.06, F1.12.16.03

Dairy:

The Milk Act (Ontario) R.R.O.
1990. O.Reg. 761.s.78(1)

Other:

The Health Protection and Promotions Act (Ontario)
O.Reg. 562, s.20; s.31

Are you in conformance?

At pre-determined intervals, confirm that the necessary volumes, pressures and temperatures of water, ice and steam for all sanitation and operational activities are provided.

Record your observations to prove that the monitoring tasks were completed. Initial and date the record.

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HACCP Plan Forms

77	The <i>HACCP Advantage</i> HACCP Plan Forms
78	Form #1: Product Description
79	Form #2: Ingredients and Incoming Materials
81	Form #3: Flow Diagram
82	Form #4: Plant Schematic
83	Form #5: Hazard Description and Critical Control Point Determination
86	Form #6: Flow Diagram with Critical Control Points
87	Form #7: Uncontrolled Hazards
88	Form #8: HACCP Matrix

blank page

The HACCP Advantage HACCP Plan Forms

The HACCP plan forms will guide you through the development of a HACCP program specific to your facility and products. These forms are designed to meet the seven HACCP principles as outlined by *Codex Alimentarius* (see the guidebook for more explanation of the HACCP principles). Completing these forms will require a comprehensive knowledge of your manufacturing facility as well as the ingredients and products processed within the facility. Beginning with Form 1, complete each column for each individual product produced at the facility. At times, the answer to a specific question or requirement may not be clearly evident and may require some research. Generic HACCP models, hazard databases and various other HACCP resources may prove helpful in these cases. After Form 1, continue to complete each form in succession. Often the information you record in one form will be called upon later. These HACCP forms will generate Critical Control Points (CCPs) where key hazards can be controlled, and identify the food safety controls needed to eliminate, prevent, or reduce the hazard to an acceptable level. The HACCP plan forms will also guide you through the identification and implementation of monitoring, corrective action, verification and record-keeping procedures.

Remember that the *HACCP Advantage* guidebook will provide you with further guidance and some examples of completed HACCP plan forms and implemented CCPs.

HACCP Plan Form Summary

Form #1:
Product Description

Form #2:
Ingredients and Incoming Materials

Form #3:
Flow Diagram

Form #4:
Plant Schematic

Form #5:
Hazard Description and Critical Control Point Determination

Form #6:
Flow Diagram with Critical Control Points

Form #7:
Uncontrolled Hazards

Form #8:
HACCP Matrix

Form #2: Ingredients and Incoming Materials |

Plan Name: _____

LIST OF INGREDIENTS

Identify potential biological, chemical or physical hazards associated with each. Answer each question and fill in the boxes with “B” if a biological hazard exists, “C” if a chemical hazard exists and “P” if a physical hazard exists.

List all incoming raw materials and ingredients by product name.	Is a potential biological hazard associated with the item (e.g. bacteria, parasites)?	Is a potential chemical hazard associated with the item (e.g. antibiotic residues, pesticide residues, allergenic concerns)?	Is a potential physical hazard associated with the item? Address both metallic and non-metallic (e.g. environmental concerns – stones, dirt; foreign material – needles, bones).

Form #2: Ingredients and Incoming Materials |

Plan Name: _____

LIST OF INCOMING MATERIALS

Identify potential biological, chemical or physical hazards associated with each. Answer each question and fill in the boxes with “B” if a biological hazard exists, “C” if a chemical hazard exists and “P” if a physical hazard exists.

List all incoming processing aids.	Is a potential biological hazard associated with the item (e.g. bacteria, parasites)?	Is a potential chemical hazard associated with the item (e.g. antibiotic residues, pesticide residues, allergenic concerns)?	Is a potential physical hazard associated with the item? Address both metallic and non-metallic (e.g. environmental concerns – stones, dirt; foreign material – needles, bones).
List all incoming packaging materials.	Is a potential biological hazard associated with the item (e.g. bacteria, parasites)?	Is a potential chemical hazard associated with the item (e.g. antibiotic residues, pesticide residues, allergenic concerns)?	Is a potential physical hazard associated with the item? Address both metallic and non-metallic (e.g. environmental concerns – stones, dirt; foreign material – needles, bones).

Form #3: Flow Diagram | Plan Name: _____

PROCESS FLOW DIAGRAM SHOWING HOW THE PRODUCT MOVES THROUGH THE FACILITY

CONSTRUCT A FLOW DIAGRAM OF THE MANUFACTURING PROCESS.

Number each step in the process and identify if potential biological, chemical or physical hazards are associated with each step in the process.

Is a potential biological hazard associated with the step (e.g. bacterial contamination, bacteria on surfaces, bacterial growth)?

Is a potential chemical hazard associated with the step (e.g. sanitation residues, chemical contamination)?

Is a potential physical hazard associated with the step (e.g. flaking paint, metal on metal contact)?

Form #4: Plant Schematic | Plan Name: _____

PLANT SCHEMATIC – FLOOR PLAN OF FACILITY AND EQUIPMENT USED IN THE PROCESS

CONSTRUCT A PLANT SCHEMATIC OF THE FACILITY, IDENTIFYING ALL EQUIPMENT AND ROOMS.

Indicate on the floor plan the flow of product and people through the facility.

On the floor plan, identify all potential cross-contamination points, whether biological, chemical or physical (e.g. raw and cooked crossovers, different species in same area, allergen products versus non allergens).

Form #5: Hazard Description and Critical Control Point Determination | Plan Name: _____

<p>INCOMING MATERIAL / PROCESS STEP List all incoming materials, all process steps, all processing aids and all potential points of cross-contamination as identified in Form #2, Form #3 and Form #4.</p>	<p>LIST ALL BIOLOGICAL, CHEMICAL & PHYSICAL HAZARDS RELATED TO INGREDIENTS, INCOMING MATERIALS, PROCESSING, PRODUCT FLOW ETC. Determine if each hazard that has been identified is controlled by prerequisite program(s). *If yes, indicate "prerequisite program" and which section of the prerequisite programs control the hazard. Proceed to next identified hazard. *If no, go to question (Q1).</p>	<p>Q1. Could a control measure(s) be used by the operator at any process step? * If no, not CCP. Indicate how this hazard will be controlled before and after the process (e.g. consumer will cook product, responsibility of supplier) on this form and proceed to the next identified hazard. *If yes, describe the control measure and go to question (Q2).</p>	<p>Q2. Is it likely that contamination with the identified hazard could occur in excess of the acceptable level or could increase to an unacceptable level? *if no, not CCP. Proceed to the next identified hazard. *if yes, go to question (Q3).</p>	<p>Q3. Is this process step specifically designed to eliminate or reduce the likely occurrence of the identified hazard to an acceptable level? *if no, go to question (Q4). *if yes, CCP. Go to last column.</p>	<p>Q4. Will a subsequent step eliminate the identified hazard or reduce its likely occurrence to an acceptable level? *If no, CCP. Go to last column. *If yes, not a CCP. Identify subsequent step and proceed to the next identified hazard.</p>	<p>CCP number *Proceed to next identified hazard.</p>
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Incoming Materials:

	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					
	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					
	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					

Form #5: Hazard Description and Critical Control Point Determination

Plan Name: _____

<p>INCOMING MATERIAL / PROCESS STEP List all incoming materials, all process steps, all processing aids and all potential points of cross-contamination as identified in Form #2, Form #3 and Form #4.</p>	<p>LIST ALL BIOLOGICAL, CHEMICAL & PHYSICAL HAZARDS RELATED TO INGREDIENTS, INCOMING MATERIALS, PROCESSING, PRODUCT FLOW ETC. Determine if each hazard that has been identified is fully controlled by prerequisite program(s). *If yes, indicate "prerequisite program" and which section of the prerequisite programs control the hazard. Proceed to next identified hazard. *If no, go to question (Q1).</p>	<p>Q1. Could a control measure(s) be used by the operator at any process step? * If no, not CCP. Indicate how this hazard will be controlled before and after the process (e.g. consumer will cook product, responsibility of supplier) on this form and proceed to the next identified hazard. *If yes, describe the control measure and go to question (Q2).</p>	<p>Q2. Is it likely that contamination with the identified hazard could occur in excess of the acceptable level or could increase to an unacceptable level? *if no, not CCP. Proceed to the next identified hazard. *if yes, go to question (Q3).</p>	<p>Q3. Is this process step specifically designed to eliminate or reduce the likely occurrence of the identified hazard to an acceptable level? *if no, go to question (Q4). *if yes, CCP. Go to last column.</p>	<p>Q4. Will a subsequent step eliminate the identified hazard or reduce its likely occurrence to an acceptable level? *If no, CCP. Go to last column. *If yes, not a CCP. Identify subsequent step and proceed to the next identified hazard.</p>	<p>CCP number * Proceed to next identified hazard.</p>
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Process Steps:

	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					
	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					
	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					

Form #5: Hazard Description and Critical Control Point Determination

Plan Name: _____

<p>INCOMING MATERIAL / PROCESS STEP List all incoming materials, all process steps, all processing aids and all potential points of cross-contamination as identified in Form #2, Form #3 and Form #4.</p>	<p>LIST ALL BIOLOGICAL, CHEMICAL & PHYSICAL HAZARDS RELATED TO INGREDIENTS, INCOMING MATERIALS, PROCESSING, PRODUCT FLOW ETC. Determine if each hazard that has been identified is fully controlled by prerequisite program(s). *If yes, indicate "prerequisite program" and which section of the prerequisite programs control the hazard. Proceed to next identified hazard. *If no, go to question (Q1).</p>	<p>Q1. Could a control measure(s) be used by the operator at any process step? * If no, not CCP. Indicate how this hazard will be controlled before and after the process (e.g. consumer will cook product, responsibility of supplier) on this form and proceed to the next identified hazard. *If yes, describe the control measure and go to question (Q2).</p>	<p>Q2. Is it likely that contamination with the identified hazard could occur in excess of the acceptable level or could increase to an unacceptable level? *if no, not CCP. Proceed to the next identified hazard. *if yes, go to question (Q3).</p>	<p>Q3. Is this process step specifically designed to eliminate or reduce the likely occurrence of the identified hazard to an acceptable level? *if no, go to question (Q4). *if yes, CCP. Go to last column.</p>	<p>Q4. Will a subsequent step eliminate the identified hazard or reduce its likely occurrence to an acceptable level? *If no, CCP. Go to last column. *If yes, not a CCP. Identify subsequent step and proceed to the next identified hazard.</p>	<p>CCP number * Proceed to next identified hazard.</p>
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Plant Schematic Diagram:

	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					
	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					
	<p><u>Biological</u> <u>Chemical</u> <u>Physical</u></p>					

Form # 6: Flow Diagram with Critical Control Points |

Plan Name: _____

**PROCESS FLOW DIAGRAM SHOWING HOW THE PRODUCT MOVES THROUGH THE FACILITY
INDICATING THE LOCATION OF IDENTIFIED CRITICAL CONTROL POINTS**

Using Form #3, identify beside the appropriate steps where the critical control points for the HACCP Plan have been identified.

Form #7: Uncontrolled Hazards | Plan Name: _____

HAZARDS NOT CONTROLLED BY OPERATOR

List here all *biological*, *chemical* and *physical* hazards that are not controlled by the operator.

Hazards	Indicate how the hazard could be addressed (e.g. cooking instructions, public education, use before date).

Form #8: HACCP Matrix | Plan Name:

Process Step Number as indicated on Form #3.	CCP Hazard Number Number sequentially.	Hazard Description Identify whether the hazard is biological, chemical or physical. Describe hazard.	Critical Limits Define the value(s) that are acceptable to maintain the CCP under control.	Monitoring Procedures Identify the following: <ul style="list-style-type: none"> • who is responsible for the task; • what procedure is to be followed; • what observation is to be made or what measurement is to be taken; • how often the task is to be performed; • where the observations are to be recorded. 	Deviation Procedures and Corrective Actions If monitoring indicates a deviation, describe: <ul style="list-style-type: none"> • who takes the corrective actions; • what procedures are to be followed; • where the actions are to be recorded. 	Verification Procedures Identify the following: <ul style="list-style-type: none"> • who is responsible for the task; • what procedure is to be followed; • what observation is to be made or what measurement is to be taken; • how often the task is to be performed; • where the observations are to be recorded. If verification indicates a deviation, describe: <ul style="list-style-type: none"> • who takes the corrective actions; • what procedures are to be followed; • where the actions are to be recorded. 	HACCP Records List records to be used.

Glossary

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Glossary

allergens: substances that cause some individuals to experience an immune system response (i.e. an allergic reaction).

anaphylaxis: a severe allergic reaction.

approved pesticides: any pesticide regulated under the *Pest Control Products Act* and registered by the Pest Management Regulatory Agency.

biological hazard: any microorganism, or toxin produced by a microorganism, that can cause foodborne illness when ingested.

Canadian Food Inspection Agency (CFIA): the federal body responsible for delivery of all federal inspection services related to food, animal health and plant protection.

certificate of analysis: documentation that denotes a qualitative or quantitative property of a food product based on scientific analysis.

chemical hazard: any chemical that may be toxic to humans and may cause immediate or long-term effects when ingested or inhaled.

Consumer Packaging and Labelling Act: a federal act that provides for a uniform method of labelling and packaging of consumer goods as well as prevention of fraud and deception by provision of factual label information.

contamination: the presence of hazards in food that can be harmful to humans. Hazards can be biological, chemical, or physical.

control (noun): the state wherein correct procedures are being followed and criteria are being met.

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

corrective action: measures taken to regain control of a hazard, determine product disposition and prevent problem reoccurrence.

critical control point (CCP): a step or point in a process at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

critical limit: the maximum or minimum value to which a biological, chemical or physical parameter must be controlled to prevent, eliminate or reduce the occurrence of a food safety hazard to an acceptable level.

cross-contamination: the physical movement, or transfer, of harmful microorganisms or trace allergens from one person, object or food product to another.

deviation: failure to meet a critical limit.

effectiveness test: a test designed to measure the effectiveness of an established program (e.g. microbiological sampling to measure sanitation program effectiveness).

establishment: any building or facility, including the surrounding area, in which food is processed or handled.

first-in, first-out (FIFO): a method of inventory control that involves the rotation of food products and helps to ensure timely use of perishable food products.

flow diagram: a systematic representation of the sequence of steps or operations used in the production or manufacture of a particular food item.

Food and Drugs Act: a federal act that establishes regulations regarding food, drugs, cosmetics and therapeutic devices.

foreign material: any substance or object that does not inherently belong in a food product and may cause injury or illness upon ingestion.

Glossary

good manufacturing practices (GMP): a combination of manufacturing practices and policies that are intended to promote good hygiene and the production of safe food products.

HACCP: Hazard Analysis and Critical Control Point – a science-based system that prevents, reduces or eliminates hazards that are significant for food safety.

HACCP plan: the documents, programs and activities prepared in accordance with the principles of HACCP to ensure control of hazards that are significant for food safety.

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

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

hygienic drying apparatus: any hand-drying tool or technique that promotes good personal hygiene (e.g. hand dryer, one-use paper towels).

lot code: any unique number or letter designation given to a pre-determined sample size of product (a lot) that identifies that lot.

maintenance chemical/lubricant: any substance (usually liquid or paste) used during activities for the upkeep or repair of equipment (e.g. oil, grease, de-greaser, paint).

monitoring: the act of conducting a planned sequence of observations or measurements of control parameters to assess whether a CCP or specific prerequisite control program is under control.

operational separation: refers to the separation of processing activities, by means other than physical separation, to ensure incompatible processing activities do not cause product contamination; commonly a separation in time, following sanitation or through use of some other procedure.

operator: a person operating or engaging in business.

over spray: improper use, or abuse, of sanitation water spray that can cause contamination of food or clean equipment.

packaging materials: any material or object that contains or is intended to contain food products, including labelling materials.

personal welfare area: any area of an establishment that is furnished for use by personnel or visitors and where food processing does not occur.

personnel: refers to any persons who are legitimately present within an establishment including employees, contractors and auditors.

pest: a plant, animal, bird or insect that is hygienically detrimental to a food-processing environment.

pest control device: any device designed and intended to trap, eliminate, limit, prevent or control pests.

physical hazard: any foreign material that could cause injury or illness if ingested.

physical separation: refers to the separation of processing activities by physical means to ensure incompatible processing activities do not cause product contamination; commonly a wall or separate processing rooms.

potable water: water that is safe to drink according to applicable potable water regulations.

pre-operational assessment: an overall inspection of a processing area or piece of processing equipment for food safety hazards or issues, that takes place prior to the commencement of food processing activities.

Glossary

prerequisite programs: the activities, procedures and documentation used to ensure that the manufacturing environment, and other factors that are not directly related to the food, are monitored and controlled to create conditions that are favourable for the production of safe food products.

product disposition: the end decision made when determining the outcome of a particular food product, usually associated with held, suspect, or returned food products (e.g. the product disposition for the held meat products was disposal).

regulatory action point (RAP): refers to any additional regulatory requirements for a regulated commodity area that are directly related to a specific prerequisite program standard.

recall: a system by which products that may be hazardous to consumers are removed from the marketplace.

record (noun): the result of documenting a specific task or measurement.

Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents: a current list of materials and non-food chemicals that have been found by the CFIA to be acceptable for use in establishments operating under the authority of the agency. This publication indicates the acceptability of products intended for use in establishments.

rework: the inclusion of partially- or fully-processed product that has been reconditioned by reprocessing in another product.

sanitation chemical: any chemical agent used for cleaning or sanitizing food contact surfaces or any other surface such as walls, ceilings or equipment.

sanitation manual: a written program manual that outlines the requirements, procedures, frequencies and responsibilities of an establishment's sanitation program.

spoilage: the process of decay in food products.

undeclared allergen: any allergen present in a food product but not stated as such on the label of that product.

validation: the process of obtaining evidence that the elements of the HACCP plan are effective.

verification: the application of methods, procedures, tests and other evaluations, in addition to monitoring, to determine conformance with the HACCP plan.

wash ticket: a record commonly created to denote that a particular piece of equipment or conveyance vehicle has been subjected to appropriate sanitation procedures.

water treatment: the addition of chemicals to water for the purposes of potability or preparation for boiler use.