

## Appendices

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## APPENDIX A: Potentially Hazardous Foods

While a great many foods can be hazardous under specific circumstances, this review is provided to supply background information about the factors involved in dealing with those foods which have the greatest potential to be hazardous.

Potentially hazardous foods are generally defined as foods in a form or state that are capable of supporting the rapid and progressive growth of infectious and/or toxigenic microorganisms. Such foods include, but are not limited to, milk or milk products, eggs, meat, poultry, fish, shellfish (edible mollusca and crustaceans), or any other ingredients.

Other foods that fall into the "potentially hazardous" category include certain baked goods (e.g., with cream filling) and some types of vegetables. Not included are foods which have a pH level of 4.6 or below, or foods which have a water activity of 0.85 or less.

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This section is extracted from the *Guidelines for Production, Distribution, Retailing and Use of Refrigerated Prepackaged Foods with Extended Shelf Life. Guideline No. 7, Health Protection Branch, Health Canada, March 1, 1992.*

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### 1. What are potentially hazardous foods?

The term "*potentially hazardous*" is used in a microbiological, not a chemical, or toxicological sense.

It must be understood that the term "potentially hazardous" refers largely to foods that are prone to temperature abuse (that is, foods might be stored at temperatures greater than 4°C (40°F) when they are supposed to be refrigerated, or kept at temperatures below 60°C (140°F) when they are supposed to be kept hot).

Exposure to temperature-abuse could occur due to inadvertent delays during preparation by the food processor (or food service operator), during transportation, marketing or handling by the consumer.

### 2. What is pH and water activity?

The pH of a food product is a scale by which the acidity and/or alkalinity of a product is measured. By definition it denotes the hydrogen ion concentration or, more simply, the acidity level of the product. The lower the pH number, the more acid is in the product. pH values range from 0 to 14. Potentially hazardous foods have a pH greater than 4.6 which favours growth of food poisoning organisms.

The term water activity, denoted by the symbol "A<sub>w</sub>", refers to the amount of water in the food

product that is available to the growing microorganism.

Water activity has been defined as the ratio of the water vapour pressure of the food and the vapour pressure of pure water at the same temperature. For this reason, water activity values range from 0 to 1 but never exceed 1. Potentially hazardous foods have water activity values favouring growth of food poisoning organisms (i.e., greater than 0.85).

### 3. What are the *general characteristics* of these potentially hazardous food products?

Potentially hazardous foods are low-acid (pH >4.6) and high water activity ( $A_w > 0.85$ ) foods, and include those products marketed as ready-to-eat refrigerated foods. Such products generally do not receive sufficient heat to kill spore-forming microorganisms (e.g., *Clostridium botulinum* and others) which may be present in the raw ingredients.

Typical packaging may include loose wrapping on supporting paperboard or Styrofoam trays, hermetically sealed containers such as glass jars, metal cans, plastic containers, plastic pouches or paperboard containers. The shelf-life of some of these products may have been extended by vacuum or modified atmosphere-packaging. Typically, these products are retailed in the refrigerated dairy, meat or delicatessen sections of food stores.

### 4. Are all raw foods potentially hazardous?

No. Raw foods are considered potentially hazardous if they support the growth of food-poisoning organisms. (*Ed. note: Foodborne illness is generally caused by infectious and/or toxigenic microorganisms.*)

Raw meats, raw fish, raw eggs, and unpasteurized milk must be cooked, pasteurized or otherwise prepared in order to kill any food-poisoning and spoilage bacteria they may carry.

### 5. What kinds of foods are *excluded* from the potentially hazardous foods category?

Foods which **do not** fall into the potentially hazardous category are:

- (a) Frozen foods which remain frozen up to the time of cooking.
- (b) Commercially canned, shelf stable foods which are safely stored in their original intact containers at normal room temperatures; (for example, canned pâté, canned corned beef or canned vegetables). Once the container has been opened, these foods are potentially hazardous because all contaminating bacteria can grow rapidly in the absence of competing micro flora.
- (c) Acidified foods (pH <4.6) such as sauerkraut, pickles, etc., and/or low-moisture ( $A_w < 0.85$ ) foods such as peanuts and cereals.

## 6. Why should bean sprouts and raw mushrooms be considered potentially hazardous?

On a few occasions, bean sprouts have been responsible for food poisoning, probably as a result of contamination with and subsequent growth of *Salmonella*, *Bacillus cereus* or *Klebsiella*.

*Clostridium botulinum* spores occur frequently in cultivated mushrooms. In laboratory experiments, it has been shown that *Clostridium botulinum*, if present, will grow and produce toxin in raw mushrooms which have been tightly wrapped and stored at room temperatures. It has therefore been recommended that raw mushrooms be refrigerated, and that packaging allow free exchange of air.

## 7. What are the concerns about extending the shelf-life of modified atmosphere-packaged or vacuum-packaged and sous-vide type foods?

The concerns are that pathogens such as *Clostridium botulinum* and *Listeria monocytogenes*, if present, may grow during the unduly extended shelf-life of these refrigerated products. These and other microorganisms are capable of growth and/or toxin production under the conditions created by the new technologies without any obvious signs of spoilage in the food itself.

*Ed. Note: Several measures can be taken to minimize these concerns. The items should not be used after the date (shelf life code) provided by the manufacturer; they should be continually stored at 4°C or less before being used, and any items remaining in a partially used container should be treated like any other potentially hazardous food (i.e., generally the products should be used within 10 days after opening).*

## 8. What factors in general control the growth of food poisoning organisms in food?

Factors controlling the growth of disease-causing microorganisms include: water activity ( $A_w$ ), acidity (pH), temperature and time, the surrounding atmosphere, the inherent resistance of the food itself and other factors. An understanding of these factors is important in food processing as this knowledge can be used to assure food safety.

Potentially hazardous foods require careful monitoring of temperatures. In many cases, adherence to proper temperature control -- either refrigeration at 4°C (40°F) or less, or heating above 60°C (140°F) — is the sole means of preventing, or at least limiting, the growth of food poisoning microorganisms.

## 9. Why is the water activity of a food product so important?

Water activity is important in foods because it is a major factor in determining whether a microorganism will or will not grow. Different microorganisms have characteristic minimum, optimum, and maximum water activity values permitting growth. One can prevent growth of pathogens by adjusting the water activity of a given food to a value below the minimum water activity permitting growth.

***Supplementary Note***

***High risk foods*** are non-acidic or slightly acidic, moist, and protein foods. These food products require a number of complex control steps to ensure product safety (i.e., proper temperature requirements at various stages of preparation). These foods include meat and meat products, milk and milk products, eggs, poultry, fish and shellfish, as well as gravies, puddings, custards, cream-filled baked goods, potato and other mayonnaise-based salads, cream-based soups and sauces.

***Medium risk foods*** are food products which require a certain step to minimize potential health risk (i.e., proper cold holding techniques). These foods include packaged vegetables, cooked cereals, soft cheeses, fresh, uncooked meat and meat sandwich spreads.

***Low risk foods*** are food products which do not pose significant health hazards by themselves. These products include ready to eat foods, peanut butter, bread, crackers, butter, dry cereals, and all foods in cans and flexible pouches until the cans or pouches are opened.

## APPENDIX B: Time/Temperature Control - Raw Animal Foods

Pathogen reduction involves a time-temperature relationship. The following minimum guidelines should be adhered to. Other time-temperature regimens might be suitable, if it can be demonstrated, with scientific data, that the regimen results in a safe food.

<b>Critical Step</b>	<b>Temperature Requirement</b>
<b>Refrigeration</b>	4 <sup>0</sup> C (40 <sup>0</sup> F) or less
<b>Freezing:</b>	minus 18 <sup>0</sup> C (0 <sup>0</sup> F) or less
<b>Parasite Reduction:</b> Raw Fish	minus 20 <sup>0</sup> C (minus 4 <sup>0</sup> F) for 7 days in a freezer or, frozen at minus 35 <sup>0</sup> C (minus 31 <sup>0</sup> F) for 15 hours
<b>Cooking:</b> Food Mixtures containing Poultry, Eggs, Meat, Fish or other potentially hazardous foods	Internal Temperature of 74 <sup>0</sup> C (165 <sup>0</sup> F) for at least 15 seconds
Pork, Lamb, Veal, Beef (whole cuts)	SEE NEXT PAGE
Rare Roast Beef	Internal temperature of 63 <sup>0</sup> C (145 <sup>0</sup> F) for 4 minutes
Poultry	Internal temperature of 74 <sup>0</sup> C (180 <sup>0</sup> F) for 15 seconds
Stuffing in, or containing of, poultry, fish, meat	74 <sup>0</sup> C (165 <sup>0</sup> F) for 15 seconds
Ground Meat <sup>1</sup>	71 <sup>0</sup> C (160 <sup>0</sup> F) for 15 seconds
Eggs <sup>2</sup>	63 <sup>0</sup> C (145 <sup>0</sup> F) for 15 seconds
Fish <sup>3</sup>	68 <sup>0</sup> C (154 <sup>0</sup> F) for 15 seconds
<b>Reheating</b>	74 <sup>0</sup> C (165 <sup>0</sup> F) for 15 seconds
<b>Holding Hot Foods</b>	60 <sup>0</sup> C (140 <sup>0</sup> F)
<b>Cooling</b>	60 <sup>0</sup> C (140 <sup>0</sup> F) to 20 <sup>0</sup> C (70 <sup>0</sup> F) within 2 hours 20 <sup>0</sup> C (70 <sup>0</sup> F) to 4 <sup>0</sup> C (40 <sup>0</sup> F) within 4 hours

1. This includes chopped, ground, flaked or minced beef, pork, or fish.

2. Customers requiring a runny yolk egg must recognize that pathogens are not destroyed until yolk has completely coagulated.

3. Customers wishing raw marinated fish and raw molluscan shell fish should be aware that it should be cooked to assure safety.

Whole cuts shall be cooked:

(1) In an oven that is preheated to the temperature specified for the roast's weight in the following chart and that is held at that temperature:

Oven Type	Oven Temperature Based on Weight	
	Less than 4.5 kg (10 lbs)	4.5 kg (10 lbs) or more
Still dry	177 <sup>0</sup> C (350 <sup>0</sup> F) or more	121 <sup>0</sup> C (250 <sup>0</sup> F) or more
Convection	163 <sup>0</sup> C (325 <sup>0</sup> F) or more	121 <sup>0</sup> C (250 <sup>0</sup> F) or more
High Humidity <sup>1</sup>	121 <sup>0</sup> C (250 <sup>0</sup> F) or less	121 <sup>0</sup> C (250 <sup>0</sup> F) or less

<sup>1</sup> high humidity greater than 90% for at least 1 hour as measured in the cooking chamber or exit of the oven; or in a moisture-impermeable bag that provides 100% humidity.

And;

(2) As specified in the following chart, to heat all parts of the food to a temperature and for the holding time that corresponds to that temperature:

Temperature <sup>0</sup> C ( <sup>0</sup> F)	Time in Minutes	Temperature <sup>0</sup> C ( <sup>0</sup> F)	Time in Seconds
54.4 (130)	112	63.9 (147)	134
55.0 (131)	89	65.0 (149)	85
56.1 (133)	56	66.1 (151)	54
57.2 (135)	36	67.2 (153)	34
57.8 (136)	28	68.3 (155)	22
58.9 (138)	18	69.4 (157)	14
60.0 (140)	12	70.0 (158)	0
61.1 (142)	8		
62.2 (144)	5		
62.8 (145)	4		

## APPENDIX C: Typical Food Allergies

### I. Strategies to Prevent Adverse Reactions

To help the industry deal with typical food allergies, the Canadian Food Inspection Agency circulated a memo to food manufacturers, importers, distributors and their associations, on **March 31, 1998**. The text of that memo is reprinted, with permission, here.

#### Labelling of Foods Causing Allergies and Sensitivities

Numerous incidents of allergic and sensitivity reactions to both domestic and imported foods are being reported to the Canadian Food Inspection Agency (CFIA). The purpose of this letter is to inform you of the potentially serious consequences of such adverse reactions and to highlight the importance of developing strategies to prevent their occurrence.

A variety of foods contain ingredients that can cause adverse reactions in hypersensitive individuals. Most adverse food reactions are caused by the following foods and their derivatives:

- **peanuts**
- **tree nuts** (almonds, Brazil nuts, cashews, hazelnuts [filberts], macadamia nuts, pecans, pinenuts, pistachios, walnuts)
- **sesame seeds**
- **milk**
- **eggs**
- **fish, crustaceans** (e.g. crab, crayfish, lobster, shrimp)  
**and shellfish** (e.g. clams, mussels, oysters, scallops)
- **soy**
- **wheat**
- **sulphites**

If these foods, or their derivatives, are not labelled or are incorrectly labelled, or if inadvertent carry-over occurs during manufacture, the results can be **serious and sometimes fatal**. Although this list represents the foods causing the most common and serious reactions, a wide variety of other foods have been reported to cause adverse reactions in certain individuals.

The Canadian *Food and Drug Regulations* require almost all prepackaged foods to have a complete list of ingredients and components (ingredients of ingredients). It is your responsibility to ensure that the foods you manufacture, import, sell or distribute are safe and meet the labelling requirements of this legislation. **Therefore, the CFIA urges you to ensure that the above foods are included in the ingredient list on your labels when present as ingredients or components. To further assist consumers in making safe food choices, the CFIA encourages you to identify the plant source of ingredients, such as hydrolysed plant proteins, starches, modified starches and lecithin (e.g., hydrolysed soy protein, wheat starch, modified wheat starch, soy lecithin).**

The CFIA recognizes the efforts by many members of the food industry to improve the accuracy of



ingredient declarations and to implement controls to reduce carry-over of ingredients. As food safety is paramount to consumers, the food industry, and government, **the CFIA also urges you to develop strategies, such as an allergen prevention plan, to manage the risks associated with those foods known to cause severe adverse reactions.** Part of your strategy should include a thorough evaluation of your manufacturing and ingredient control procedures. It is also your responsibility to ensure that all prepackaged foods you import are fully and correctly labelled, and preferably are sourced from suppliers having an allergy prevention plan in place.

Undeclared ingredients may occur in foods as a result of:

- **carry-over** of product through incomplete cleaning of food contact surfaces and utensils, sometimes because of poor equipment design;
- **inappropriate use of rework** containing allergenic ingredients;
- **ingredient changes**, substitutions or additions not reflected on the label;
- **incorrect labels** put onto products;
- **incorrect or incomplete** list of ingredients;
- **unknown ingredients in raw materials**;
- **misrepresentation of common names** to describe products/ingredients (e.g. mandelonas for reformed, re flavoured peanut);
- **labelling exemptions** under the *Food and Drug Regulations*.

The CFIA recognizes that despite all possible precautions, the presence of allergenic ingredients cannot always be avoided. In order to assist consumers with food sensitivities, the Canadian government, in consultation with industry and allergy groups, developed a policy on precautionary labelling, e.g., “may contain peanuts”. This policy allows the food industry to voluntarily label products which may inadvertently contain substances capable of causing severe adverse reactions. Precautionary labelling, however, must be truthful and must not be used in lieu of adherence to good manufacturing practices.

Accurate and complete labelling of foods will reduce the need for costly food recalls. It will also assist Canadians with severe food sensitivities to make safe choices from a wider variety of foods in the marketplace.

For further information, please contact the Canadian Food Inspection Agency office nearest you.

Anne A. MacKenzie  
Director General  
Food Inspection Directorate  
March 31, 1998

## II. Prevention Notes for Consumers and Restaurant Staff

Should consumers who have food allergies and/or who are the parents of children who have food allergies wish to purchase products that are not supplier packaged and/or do not carry an ingredient

list, it is suggested that they request a copy of the ingredient list or recipe. Should they have any doubts, it is recommended that they review the ingredient list or recipe with their physician prior to purchasing such a product.

Restaurants can obtain a *Restaurant Warning Card* which is designed to alert restaurant staff to consumer allergies. It is intended to help to minimize misunderstandings and mistakes. To receive more information about this, please contact:

**National Allergy/Asthma Information Association** 30 Eglinton Avenue, West, Suite 750  
Mississauga, Ontario L5R 3E7  
Tel: (905) 712-2242  
Fax: (905) 712-2245  
Tollfree: (800) 611-7011  
Website: [www.aaia.national@sympatico.ca](mailto:www.aaia.national@sympatico.ca)

**Canadian Restaurant and Food Services Association** 316 Bloor Street West  
Toronto, Ontario M5S 1W5  
Tel: (416) 923-8416  
Fax: (613) 923-1450  
Tollfree: (800) 387-5649  
Website: [www.fbshow.com](http://www.fbshow.com)

## APPENDIX D: Recall Manuals

### Food Emergency Recall Guidelines

Chapters 1 & 2

The Canadian Food Inspection Agency

59 Camelot Drive

Nepean, Ontario K1A 0Y9

Tel: (613) 225-2342

Fax: (613) 228-6611

Email: cfiamaster@em.agr.ca

Website: www.cfia-acia.agr.ca

### 2. Supply Chain Food Product Recall Manual

Food and Consumer Products Manufacturers of Canada/Canadian Council of Grocery Distributors

885 Don Mills Road, Suite 301

Don Mills, Ontario

M3C 1V9

Tel: (416) 510-8024 ext. 2266

Fax: (416) 510-8043

Email: info@fcPMC.com

Website: www.fcPMC.com

P.O. Box 1082, Place du Parc

Montreal, Quebec

H2W 2P4

Tel: (514) 982-0267

Fax: (514) 849-3021

### 3. Guidelines for Product Recall

Grocery Manufacturers of America

1010 Wisconsin Avenue N.W., Suite 800

Washington, D.C. 20007

Tel: (202) 337-9400

Fax: (202) 337-4508

Website: www.gmaBrands.com

### 4. Recall Manual:

Guidelines for evaluation of potential product contamination and procedures for withdrawal and/or recall of food products

Food Marketing Institute

800 Connecticut Avenue N.W.

Washington, D.C. 20006

Tel: (202) 429-8273

Fax: (202) 429-4550

Email: fightbac@mindspring.com

Website: www.fightbac.org

### 5. Standard Instructions Outline for Product Recall

National Dairy Council of Canada  
221 Laurier Avenue  
EastOttawa, Ontario K1N 6P1  
Tel: (613) 238-4116  
Fax: (613) 238-6247  
Email: [info@ndcc.ca](mailto:info@ndcc.ca)  
Website: [www.ndcc.ca](http://www.ndcc.ca)

## APPENDIX E: Selected Information Sources

### 1. Compositional Standards for Meat Products

The Meat Inspection Regulations of the Canada Meat Inspection Act contain precise information concerning compositional standards for meat products ranging from ground meat and sausage to stews, dinners and shortening. See Schedule 1.

The Canadian Food Inspection Agency  
59 Camelot Drive  
Nepean, Ontario K1A 0Y9  
Tel: (613) 225-2342

Website: [www.cfia-acia.agr.ca/english/actsregs/meatreg/sched1.htm](http://www.cfia-acia.agr.ca/english/actsregs/meatreg/sched1.htm) (English)  
[www.cfia-acia.agr.ca/francasi/actsregs/meatreg/annexe1.html](http://www.cfia-acia.agr.ca/francasi/actsregs/meatreg/annexe1.html) (French)

### 2. Hazard Analysis Critical Control Point : Aspects of Food Safety

A comprehensive manual, the *HACCP Course Book* (formerly the *HACCP Reference Book*) is offered for sale by the Educational Foundation of the National Restaurant Association.

#### *HACCP Course Book*

Educational Foundation of the National Restaurant Association

Tel: (312) 715-1010

Fax: (312) 715-0331

Tollfree: (800) 765-2122; ext.701 — Customer Service

Website: [www.edfound.org](http://www.edfound.org)

### 3. NSF Standards

NSF International (formerly the National Sanitation Foundation) maintains a comprehensive listing of standards for food equipment, from food carts to dispensing freezers, dinnerware to dishwashers. Publications are for sale.

NSF International

P.O. Box 130140

Ann Arbor, Michigan, 48113-0140

Tel: 734-769-8010

Toll free: 888-NSF-9000

Fax: 734-669-0196

Email: [info@nsf.org](mailto:info@nsf.org)

Website: [www.nsf.com](http://www.nsf.com)

**APPENDIX F – Health Guidelines for Bottled Water and Packaged Ice Facilities**

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***Health Guidelines for  
Bottled Water and  
Packaged Ice Facilities***

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## **I. INTRODUCTION**

### **Purpose**

Bottled water and packaged ice are considered food products and, as such, are regulated under the Public Health Act – Food Regulation 240/85. The purpose of this guideline is to set minimum requirements to ensure that bottled water and packaged ice products are processed, packaged, shipped and stored in a safe and sanitary manner.

### **Scope**

This document applies to all facilities processing and/or packaging water or ice for human consumption.

### **Approval of a facility**

All bottled water and packaged ice facilities are required to obtain a Food Establishment permit and approval to operate from the Regional Health Authority. This document will be used as the principle guideline in conjunction with the Alberta Food Regulation 240/85 when reviewing an application for a bottled water or packaged ice facility.



## II. DEFINITIONS

<b>Bottled Water</b>	Means water that is sealed in containers, or other single or multi-use containers and intended for human consumption.
<b>Bottled Water Facility</b>	Means any place or establishment in which bottled water is prepared, processed, or packaged.
<b>Equipment</b>	Means any item or apparatus used in the preparation, processing, serving, dispensing or storage of bottled water or packaged ice;
<b>Packaged Ice</b>	Means water in a frozen state that is sealed in a container or package and intended for human consumption.
<b>Packaged Ice Facility</b>	Means any place or establishment in which ice is prepared, processed and packaged.
<b>Facility Operator</b>	Means any person who owns or operates bottled water or packaged ice facility.
<b>Sanitize</b>	Means to treat by a process which destroys most microorganisms, including all pathogens.
<b>Utensil</b>	Means equipment that is used in the preparation, processing, service, storage, and dispensing of bottled water or packaged ice, but does not include tabletops, counter tops or similar working surfaces.

### III. OPERATIONAL REQUIREMENTS

#### Premises

1. No person shall operate a Bottled Water Facility or Packaged Ice Facility without first obtaining a Food Establishment Permit from the Regional Health Authority.
2. Bottled water and packaged ice facilities shall be entirely separate from any areas used for living, sleeping, dining, or other activities that may compromise the safe and sanitary processing of bottled water and packaged ice.
3. The facilities shall be maintained in good repair at all times.
4. Floors, walls and ceilings in the work area(s) of the facility shall be constructed of materials that are durable, non-absorbent and are easy to wash and sanitize.
5. The facilities shall be equipped with effective screening and tight fitting closures to prevent the entry of insects and rodents.
6. Sufficient and effective lighting shall be provided in all work areas. Light bulbs, fixtures, skylights, or other glass fixtures suspended over processing areas shall be shielded or of a type that, in the event of breakage, will prevent the scattering of broken glass onto water, ice or equipment.
7. Work surfaces shall be smooth, impervious and able to withstand regular wet washings and sanitizing.
8. The plumbing and drainage systems within the facility shall be clear of any potential means of back-syphonage or cross contamination and maintained in proper operating condition.
9. Sufficient storage space shall be provided for the storage of supplies and be kept free of items that may interfere or otherwise compromise the safe and sanitary processing of bottled water and/or packaged ice.

#### Water Supply

10. Facility operator(s) are responsible for ensuring that the final products are tested according to the following prescribed criteria:
  - a) monthly, for microbiological parameters;
  - b) annually, for chemical parameters, or
  - c) as required by the Executive Officer of the Regional Health Authority.

Note: The testing as described above must be carried out by trained technical personnel using standard operating procedures or by an accredited laboratory.

11. All bottled water and packaged ice shall not exceed the microbiological parameters as outlined in Division 12 of the Food and Drugs Act and Regulations. (please see Appendix 1)
12. Records of all sample test results shall be retained for one year and available for review by an Executive Officer of the Regional Health Authority.
13. Satisfactory sample results of final products shall be a prerequisite requirement to receiving a Food Establishment Permit.

### **Equipment**

14. All equipment and utensils used in facility production areas shall be easily cleaned, maintained in good repair and stored in a sanitary manner. Materials used on contact surfaces shall be smooth, non-toxic and non-absorbent.
15. Contact surfaces, including storage bins, conveyors, packaging equipment and hand utensils shall be kept clean and in good repair. All contact surfaces shall be cleaned and sanitized as often as necessary to insure that no contamination of the product occurs.
16. Equipment lubricants shall not contaminate the product and lubricants shall be safe for food use.
17. All portable equipment, utensils and bottle caps shall be maintained in a clean and sanitary condition and protected from contamination.
18. Equipment or utensils that may contact the floor or are otherwise subjected to contamination shall be thoroughly cleaned and sanitized before re-use.
19. Equipment and utensils used in the facility shall be free of corrosion.
20. Bottles and/or containers shall be:
  - a) safe for food use;
  - b) washed and sanitized prior to being used;
  - c) stored in a clean and well maintained area, and
  - d) transported in clean vehicles once filled.

Note: The process for item (b), above, shall include a detergent wash, a clear

rinse, and a final sanitizing rinse, either in an automated system or a manual, three-compartment system. Chemicals used for sanitizing or disinfecting should be used in accordance with the manufacturer's instruction and are listed in the "*Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products*" published by Agriculture and Agri-Food Canada or the manufacturer has "a letter of no objection" from Health Canada. Some of these are identified by a drug identification number (DIN) located on the label. ([www.inspection.gc.ca/english/ppc/reference/cone.shtml](http://www.inspection.gc.ca/english/ppc/reference/cone.shtml)).

21. Fill nozzles shall be sanitized prior to each production run or as often as necessary to ensure that potential for product contamination is minimized.

#### **Personnel**

22. Unauthorized person shall not be allowed in any area of the facility where production is occurring.
23. All persons, while working on production shall be clean in their person, free from communicable disease, wear clean clothing and footwear, refrain from smoking, and keep their hair effectively under control.

#### **General Practices**

24. Handwashing signs should be strategically posted throughout the facility.
25. A procedure for effective and expedient product recall shall be maintained (see example in Appendix 2)
26. A detailed written cleaning and sanitizing schedule shall be maintained and followed.
27. Proper labeling falls within the Food and Drugs Act and Regulations; the Consumer Packaging and Labeling Act and Regulations; and the Guide to Food Labeling and Advertising, administered by the Canadian Food Inspection Agency. (see example in Appendix 3)
28. A generic process flow is included for reference. (Appendix 4)
29. Water dispenser/cooler maintenance guidelines. (Appendix 5)

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**APPENDIX 1**  
**Division 12 – excerpt from the Food and Drugs Regulation**  
**(in part)**

***DIVISION 12***  
***PREPACKAGED WATER AND ICE***

[SOR/80-633, s. 1]

Bottled water

Water represented as mineral water or spring water,

- shall not contain any coliform bacteria,

.

No person shall sell water in sealed containers, other than water represented as mineral water or spring water, if it contains,

- any coliform bacteria,
- more than 100 total aerobic bacteria per millilitre,

Packaged Ice

No person shall sell prepackaged ice if it contains

- any coliform bacteria

## APPENDIX 2

### RECOMMENDED RECALL PLAN

***Rationale:***

Product recall is an effective method of removing products from the market place that are identified as presenting a potential health hazard to consumers. This action is typically taken on a voluntary basis by the producer or distributor or as an order of the Regional Health Authority or other legislative authority.

***Methodology:***

To facilitate the implementation of a product recall or advisory, each container shall be marked to identify the manufacturer and the lot number. The lot number is an identifier of units produced under identical conditions. It includes the date/time of production and other processing data that allows the product to be effectively distinguished from other manufactured and distribution lots. The facility operator shall maintain records of lot numbers and their distribution (i.e. to whom the various lot numbers were sold).

To facilitate the prompt recall of a product, a written plan is required. The plan should include:

- ❖ Person or persons responsible,
- ❖ Means of implementing a recall,
- ❖ How to determine the extent of the recall,
- ❖ Means of notifying affected customers, and
- ❖ Control measures for securing the returned product.

This could include customer lists, distribution, contact persons (with phone numbers), and location of distribution.

**APPENDIX 3****EXAMPLE OF GENERAL LABELING REQUIREMENTS –  
excerpt from Division 12, Food and Drugs Regulation - Canadian Food  
Inspection Agency  
(for information only)**

The principal display panel of the label on a container of water represented as mineral water or spring water shall carry a statement

- (a) of the geographical location of the underground source from which it is obtained;
- (b) of the total dissolved mineral salt content expressed in parts per million;
- (c) of the total fluoride ion content expressed in parts per million; and
- (d) of any addition of fluoride or ozone thereto.

A statement of the total fluoride ion content expressed in parts per million shall appear on the principal display panel of the label on a sealed container of water, other than water represented as mineral water or spring water and on the label on a container of prepackaged ice.

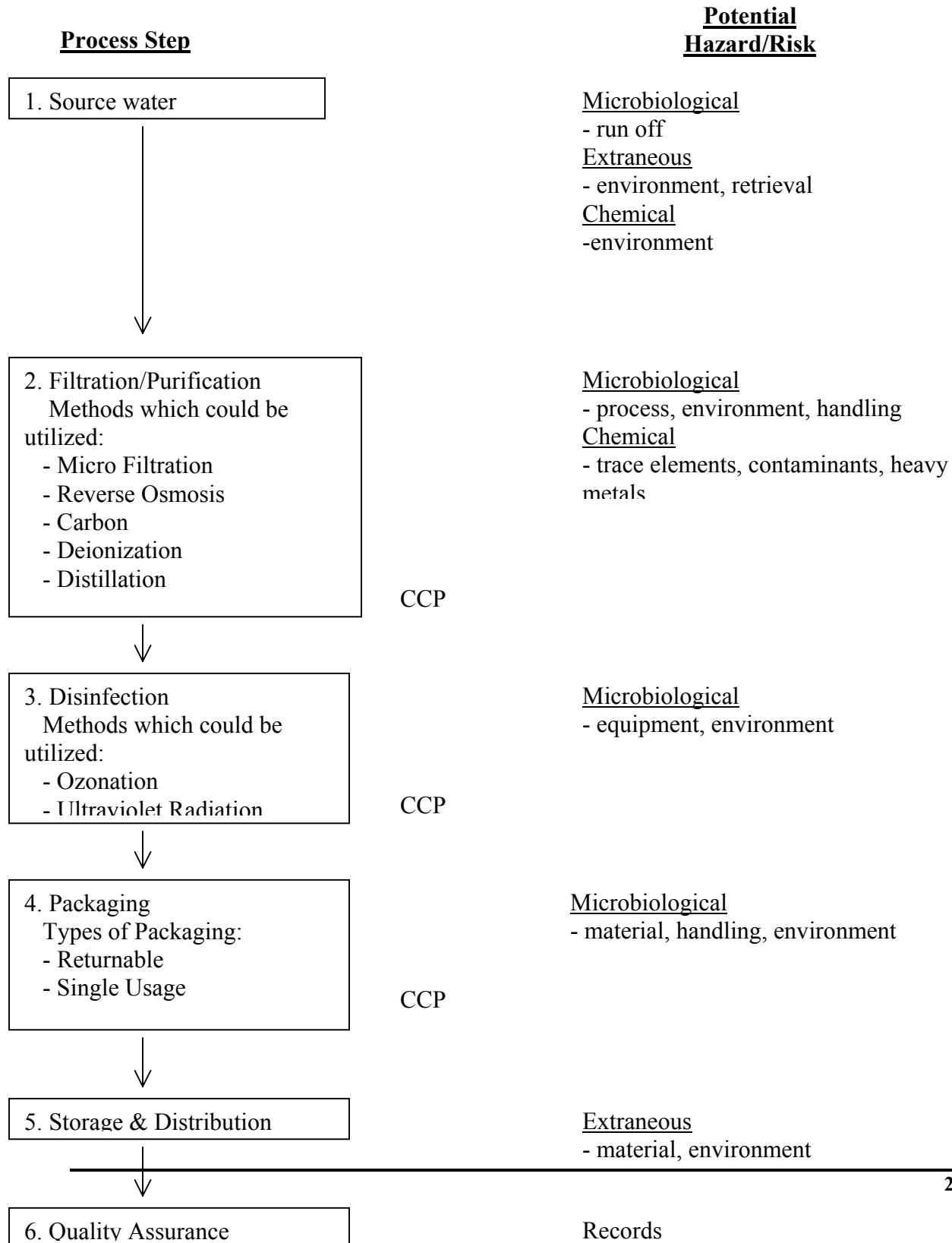
The label on a sealed container of water, other than water represented as mineral water or spring water, shall bear a description on its principal display panel of any treatment the water has undergone (*ie. demineralized water by reverse osmosis*) with the exception of the following:

- (a) the addition of an ingredient declared in the list of ingredients;
- (b) chlorination followed by the removal of the agent used for the chlorination together with any chlorine and compounds of chlorine produced in the water;
- (c) decantation; and
- (d) filtration.

*This specific label typesetting is a requirement of the CFIA.*

## APPENDIX 4

### Generic Process Flow Bottled Water





## APPENDIX 5

### WATER DISPENSER/COOLER MAINTENANCE GUIDELINES

1. Customers and clients of water dispenser and cooler units shall be provided with a maintenance guide which should include the following minimum cleaning and sanitizing procedures:
  - a) Maintain the area around the cooler in a clean condition.
  - b) Do not use sprays or mists around the cooler.
  - c) Store full bottles in a clean, dust-free area.
  - d) When changing bottles, wash your hands, clean and sanitize cooler bottle seat and the neck of the full bottle. (Ensure that hands do not come into contact with the neck or top of the bottle).
  - e) Refilling instructions:
    - I. Unplug the unit and remove the bottle.
    - II. Drain reservoir and fill it with the sanitizing solution (see below).
    - III. Let stand for 2 minutes.
    - IV. Drain through faucets.
    - V. Wipe down exterior components of cooler with bleach solution.
    - VI. Place new bottle on cooler and plug in.
  - f) Sanitize cooler units routinely (suggested once every 3 months).
  - g) Regularly clean drip tray by washing tray and screen in mild detergent; rinse well.

#### Sanitizing Solution:

An effective sanitizing solution can be made using the following concentrations of water and household bleach.

- ◆ 14mL (1Tbsp, ½ oz) chlorine (ie household bleach) in 4.5L (1 imp. gallon) of water, or
- ◆ 2mL (½ tsp.) of chlorine (ie. household bleach) in one litre of water.

Note: These examples are approximations based on 5% available chlorine or household bleach). Other disinfecting solutions may be suitable. Check with your water cooler supplier.

2. Maintenance of hot and cold water dispensers should follow special manufacturer instructions.

## **APPENDIX G: Food Bank Guidelines**

In recent years, food banks have been established in order to meet a very important need: to provide adequate amounts of nutritious food to people not having sufficient means to purchase it themselves.

Food banks are unique in that they have different needs than food retail or foodservice establishments. Food banks rely mainly on donations and as such, may raise the following issues:

- Unknown sources of food,
- Questions arise relating to how and how long the food has been stored,
- Food safety knowledge of the volunteers.

It is important to ensure that food distributed is safe to consume. The following standard is intended to assist food banks in acceptable safety precautions associated with handling and distributing of food.

### **SCOPE**

These guidelines apply to food banks, but not to soup kitchens or similar facilities where food is for consumption on-site, nor to food banks which conduct on-site kitchen workshops and training seminars to teach clients how to cook nutritious and inexpensive meals.

**DEFINITIONS**

Food bank	Means a non-profit organization that operates with the exclusive intent of feeding the hungry, and receives, holds, packages, repackages or distributes food to be consumed off the premises, but does not process food.
Potentially Hazardous food	Any food that consists in whole or in part of milk or egg products, meat, poultry, fish, shellfish, or other ingredients capable of supporting rapid and progressive growth of pathogenic micro- organisms.
Processed food	Means to make raw foods ready-to-eat and includes washing, rinsing, cooking, smoking, salting, canning, freezing, pasteurizing and reprocessing of previously processed food.
Soup kitchen	Means a non-profit organization that operates with the exclusive intent of feeding the hungry, and receives, holds and processes food to be consumed on the premises.

**Food Supplies**

1. The following foods are not acceptable for distribution:
  - Unpasteurized milk or milk products;
  - Home canned vegetables;
  - Home canned meat/fish products or combination products i.e. antipasto
  - uninspected meat
  - Cracked eggs
  - Partially used hazardous food
  - Unidentifiable foods
2. Donated food should be inspected for any sources of contamination.
3. Foods donated from flood, fire, smoke can be highly hazardous and generally should not be accepted. Any questions contact your local regional health authority.
4. Donated freezers full of food must be reviewed with extreme caution. Food should not be used if it looks like it has been thawed and refrozen. If products are not identifiable then these foods should not be distributed.

**Food Protection**

5. Potentially hazardous and hazardous food shall be held at a temperature of 4C or less.
6. Frozen foods shall be kept frozen.
7. Food shall be protected at all times from unsanitary conditions and from potential contamination, including dust, insects, rodents, animals, poisonous, toxic materials, unclean equipment and utensils, unnecessary handling, coughs and sneezes.
8. Packaging material used for finished product must be of a material that will not contaminate the food product. New packaging material must be used for foods that could be eaten without washing (eg. fruit, vegetables, salad, or bread products)
9. Partially used potentially hazardous and hazardous food shall not be repackaged.
10. Partially used large bags or containers of dry goods (flour, sugar, salt, dry cereal, etc.) may be repackaged, if the product is viewed as being acceptable.
11. The following foods should be discarded if they have signs of mould:
  - Soft cheeses (such as Brie)
  - Sour cream, yogurt, cottage cheese
  - Bacon, hot dogs, sliced luncheon meats
  - Meat pies
  - Bread, cake, rolls, flour, pastry
  - Peanuts and peanut butter

- Juices, berries
  - Jams, jellies, syrups
  - Cucumbers, tomatoes, spinach, lettuce or other leafy vegetables
  - Bananas, peaches or melons
  - Corn on the cob
12. The following foods may be salvaged if they have signs of mould and if they are trimmed at least one inch from the edge of the mould:
- Hard cheeses (cheddar, swiss)
  - Bell peppers, carrots, cabbage
  - Broccoli, cauliflower, brussel sprouts, garlic onions
  - Potatoes, turnips, zucchini
  - Apples and pears
13. Ingredient labels are required for all products being divided into smaller units or repackaged. If the product that is being repackaged has a *best before* date, this date must be transferred to the repackaged item.

### Food Handlers

14. All persons handling food products shall conform to proper hygiene practices and be free from disease conditions that may contaminate food.
15. The foodbank manager, permanent employees or key volunteers who are present on a regular basis are encouraged to complete a recognized food sanitation and hygiene training program.
16. There shall be no smoking in the food area.

### Equipment and Utensils

17. All utensils, counters, shelves, tables, refrigeration equipment and other food contact surfaces should be made of non-toxic, non-corrosive materials as to be easily cleaned and in good repair.
18. Single service articles, once used, shall be discarded.
19. Utensils and food contact surfaces should be regularly cleaned and sanitized. A bleach sanitizing solution for dishwashing by hand and surface sanitizing is as follows:
- 5ml (1/2 oz. or one teaspoon) of chlorine bleach (javex) in 4 litres (one gallon) of water.
20. Adequate clean-up equipment must be provided.

### Garbage and Refuse

21. All refuse shall be kept in leak-proof, non-absorbent containers in sufficient numbers.

Garbage should be stored in covered containers and removed frequently.

## APPENDIX H: Bed and Breakfast Food Protection Guidelines

1. An adequate supply of hot and cold potable water shall be provided. A private source of drinking water shall be subject to the approval of the Regional Health Authority and tested annually.
2. All food preparation surfaces shall be smooth, impervious to moisture and easily cleanable.
3. All food must come from an approved/inspected source. The use of home-canned food, with the exception of fruit jams, jellies, pickles, is prohibited.
4. All foods are to be protected from contamination.
5. Perishable foods or potentially hazardous foods must be kept refrigerated at a temperature of 4°C(40°F) or lower or held at 60°C(140°F) or greater. The Bed and Breakfast operator shall keep a food grade thermometer in the refrigerator(s) to monitor the temperature.
6. All frozen food items must be stored at a temperature of -18°C(0°F)
7. Once served to a guest, open portions of leftover food must not be reused.
8. All utensils (dishes, silverware, etc.) must be stored in a clean and sanitary condition.
9. All reusable utensils are to be effectively cleaned and sanitized by using one of the following methods:
  - A manual three-compartment sink procedure, or  
*For example:*  
If your kitchen has only a two-compartment sink, either refilling the second sink with a sanitizing solution after rinsing or using a tub or basin with a sanitizing solution can incorporate the three-compartment method. This can be discussed with your Public Health Inspector.
  - b) An approved commercial dishwasher, or
  - c) A domestic or home-style dishwasher provided the following criteria are met and have been approved by the local Public Health Inspector.
    - i) The dishwasher must effectively remove physical soil from all surfaces of dishes,
    - ii) The dishwasher must sanitize the dishes. ie. by the application of sufficient accumulative heat (sani cycle) or by the addition of chemical sanitiser and
  - ii) The dishwasher must be installed and operated according to the manufacturer's instructions for the highest level of sanitization possible.

10. Pets may be present on the premises, but must be kept out of preparation and dining areas during food preparation and serving for the guests.
11. Where laundry facilities are not physically separated from the kitchen, soiled laundry shall not be stored or processed during food preparation and service.
12. A food handler while engaged in food handling shall:
  - a) be clean in his person,
  - b) be free from infected sores or wounds,
  - c) wear only clean clothing,
  - d) refrain from smoking or chewing tobacco, and
  - e) keep his hair effectively under control.
13. It is recommended that the food handler complete a FOOD SANITATION AND HYGIENE training course.
14. A food handler must exhibit cleanliness and good personal hygiene.
15. Soap and paper towels shall be provided at the kitchen sink.
16. The residential kitchen should be restricted to cooking staff only during food preparation and service.



## **APPENDIX I: Meat Facility Standards**

### **Establishment: Design and Maintenance**

1. Plans for all new construction, whether it be for new meat facilities or renovation of existing meat facilities, shall be submitted to the appropriate ministry (ie. AAFRD, Regional Health Authority).
2. Plans submitted shall include:
  - layout of facility;
  - equipment in the facility;
  - sewer/water provisions;
  - lighting;
  - surface finishes;
  - product/personnel flow;
  - sanitation program.
3. Walls and ceilings are made of waterproof, non-absorbent, washable materials. Where appropriate, angles between walls, between walls and floors, between walls and ceilings should be sealed and coved for easy cleaning and sanitation.
4. Floors are constructed of waterproof, non-absorbent, washable and non-slip materials which are easy to clean and sanitize. Floors should be sloped for sufficient drainage of liquids and each processing area is provided with sufficient drains to prevent water accumulation.
5. The plumbing system and the sanitary drainage system or private sewage disposal system, as the case may be, including drains, fixtures, stacks, traps, vents, waste disposal facilities, pump-out tanks and septic tanks, are maintained in proper operating condition and free from defects.
6. Lighting systems in the meat facility are capable of providing lighting adequate for the purposes of the facility, do not alter food color and are maintained in operating condition.
7. Lighting fixtures are located and are of safety type or protected to prevent contamination of food in case of breakage.
8. A supply of hot and cold potable water sufficient to meet the needs of the meat facility is available.
9. Handwashing stations adequate in number and location shall be available to ensure convenient access to all employees. Sinks must be supplied with hot and cold running water, soap, hot air dryers or single service paper towels and a waste bin.
10. The meat facility must be equipped with appropriate equipment for cleaning and sanitation.

- (ie. a high pressure washer for cleaning and sanitizing the premise and large equipment, and a two compartment sink for cleaning and sanitizing smaller equipment.)
11. Depending on the operation, adequate facilities are available for heating, cooking, cooling and freezing and for storing refrigerated or frozen meat and meat products. Temperature monitoring equipment is a requirement (e.g. thermometers). Temperature for coolers shall be less than 4°C (40°F). Temperature for freezers shall be less than -18°C (0°F).
  12. Adequate facilities for the storage of food, ingredients and non-food chemicals (e.g. cleaning materials) should be provided.
  13. Windows and other openings should be constructed to permit easy cleaning and those which are open should be fitted with screens to prevent the entry of pests.
  14. Doors should have smooth, non-absorbent surfaces and be close fitting.
  15. Overhead structures and fittings are installed and maintained in a manner that avoids direct or indirect contamination of meat and meat products by condensation, drip and dirt. They also should not interfere with cleaning and sanitation.
  16. Ventilation is provided to prevent excessive heat, steam condensation and dust and to remove contaminated air. The direction of airflow is never from a dirty area to a clean area. Ventilation openings are screened or protected to prevent entry of pests. Screens are easily removable for cleaning.
  17. Adequate and conveniently located employee facilities are to be provided. These areas should be well lit and ventilated; and located and built in a manner to prevent cross contamination between these facilities and meat processing areas (e.g. washrooms must not open directly onto processing areas). Adequate facilities for washing, sanitizing and drying hands must be provided.
  18. The water supply shall be potable, with characteristics within limits recommended in the latest edition of "Guidelines for Canadian Drinking Water Quality" published by Health Canada.
  19. All water storage facilities need to be maintained, cleaned and sanitized on a regular basis to prevent contamination of water.
  20. Surrounding areas under the establishment's control are properly maintained to control the entry of dust, run off and other potential sources of contamination to the manufacturing/processing area.

## Equipment: Design and Maintenance

**Objective:**

The equipment used in the manufacture of food shall be designed, constructed, maintained, operated and arranged in a manner that:

- permits the effective cleaning of its surfaces;
- prevents contamination of the food; and
- permits it to function in accordance with its intended use.

**Rationale:**

The purpose of these requirements is to prevent the contamination of food by microorganisms, dust and foreign material such as rust, lubricant and parts coming from the equipment. In addition, this is to prevent cross-contamination with other food, which may be of concern to people with food allergies. Poor design and construction may result in equipment that is difficult to clean and requires a higher degree of maintenance. Contamination problems may also arise from poor maintenance, misuse of equipment, exceeding the capacity of the equipment, use of worn-out equipment and improper modification of equipment.

Equipment arranged in an orderly manner permits cleaning of adjacent areas, does not interfere with other processing operations and minimizes cross-tracking by personnel.

1. Equipment is designed, constructed and installed to ensure that it is capable of delivering the requirements of the manufacturing process.
2. Food contact surfaces of equipment and utensils are smooth, non-corrosive, non-absorbent, non-toxic, free from pitting, cracks or crevices.
3. All equipment and utensils are designed, constructed and installed to permit adequate cleaning and sanitizing.

Examples of coatings, paints, chemicals, lubricants and other material used for food contact surfaces or equipment are listed in the "Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents", published by the Canadian Food Inspection Agency (CFIA).

4. Procedures are in place for maintenance and calibration of equipment that could have an impact on food safety.
5. Climate control spaces (e.g. freezers, refrigerators, smoke houses, curing and drying rooms, etc.) are equipped with appropriate measurement or recording devices (e.g. temperature, humidity, air flow, etc.).

6. Containers for inedible material and waste are leak-proof, easily distinguishable from other containers, constructed of an impervious material, which is easy to clean or disposable and, where appropriate, can be closed securely.
7. Equipment and utensils used for inedible material or wastes are identified as such and are not used for edible material.

# Establishment: Sanitation and Pest Control

Appendices

January 2003

## Objective:

To establish effective sanitation and pest control programs ensuring

- proper cleaning and sanitation of facilities, equipment and utensils;
- control of pests; and
- effective monitoring of cleaning and sanitation procedures.

## Rationale:

Sanitation and pest control in a meat processing facility directly influences the safety and quality of meat and meat products. Production of safe high quality products requires that they be produced in equipment and in an area that is free from environmental and microbiological contamination. Sanitation and pest control programs, written, practiced and monitored, provide assurance that levels of cleanliness and sanitation are maintained.

1. Written sanitation and pest control programs are to be developed, implemented, maintained and reviewed periodically and should contain procedures for:
  - cleaning requirements for the facility, processing and storage areas; including coolers, floors, walls, cooling units;
  - cleaning requirements for equipment and utensils;
  - method of cleaning;
  - frequency of cleaning;
  - cleaning and sanitation agents, their concentrations and equipment to be used;
  - method of pest control;
  - chemicals, their concentration and frequency of application;
  - where applicable, the name of the pest control company or individual contracted for the pest control program;
  - the personnel responsible for carrying out sanitation and pest control programs.
2. All approved cleaning and sanitizing chemicals must be used in accordance with the manufacturer's instructions, examples are listed in the "Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents", published by the Canadian Food Inspection Agency (CFIA).
3. Pesticides used are registered under the Agriculture and Agri-Food Canada, *Pest Control Product Act and Regulations* and "Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents", published by CFIA.
4. Cleaning and sanitation programs should be in place to ensure that all areas, equipment and utensils are cleaned and sanitized on a daily basis.
5. Buildings should be kept in good repair. Cracks and crevices, drains and other places where pests are likely to gain access should be kept sealed.
6. Suitable provision must be made for the removal and storage of waste.

**Objectives**

To ensure that those who come directly or indirectly into contact with food are not likely to contaminate food by:

- maintaining an appropriate degree of personal cleanliness and hygiene; and
- following proper food handling practices

**Rationale:**

People, who do not maintain an appropriate degree of personal cleanliness, have certain illnesses or conditions or behave inappropriately, may contaminate food and transmit illness to consumers.

To prevent food contamination and transmission of disease to consumers:

1. Food handlers should maintain personal cleanliness, wear suitable protective clothing, hair restraints and footwear. Protective clothing, aprons and gloves should be cleaned frequently and maintained in a good state of repair.
2. Food handlers engaged in food handling activities should refrain from behavior (e.g. smoking, spitting, chewing or eating) which could result in contamination of food.
3. All removable jewelry should be removed prior to working and personal effects and clothing should not be kept in food handling areas.
4. Personnel should always wash their hands when personal cleanliness may affect food safety, for example:
  - at the start of food handling activities;
  - immediately after using the toilet;
  - after handling raw food or any contaminated material, where this could result in contamination of other food items;
  - after sneezing or picking items off the floor.

**Objective:**

To provide individuals handling meat and meat products with appropriate training and to establish an understanding of the importance of proper food handling practices and manufacturing controls to ensure production of safe meat products.

**Rationale:**

Training in food handling and manufacturing controls is fundamentally important to any meat-processing establishment. It is important that personnel employed in the production of meat products understand their duties relative to food safety. Inadequate training and supervision of all people involved in meat production and handling poses a threat to the safety of meat products and to the health of the consumer.

1. Recommended as per *Food Regulation*

## Transportation and Storage

**Objectives:**

Measures should be taken to ensure that meat and meat products are transported or stored under conditions that:

- protect meat from potential sources of contamination;
- protect meat from damage likely to render the meat unusable for consumption; and
- provide an environment which effectively controls the growth of pathogenic or spoilage microorganisms and the production of toxins in meat and meat products.

**Rationale:**

Meat may become contaminated, or may not reach its destination in a suitable condition for consumption, unless effective control measures are taken during transport even where adequate hygiene control measures have been taken earlier in the food chain.

1. Adequate sanitation of the storage premises and of the transportation vehicle is practiced to prevent contamination of meat products with any chemical, microbiological or foreign material hazards.
2. Meat and meat products, stored and distributed, refrigerated or frozen, are continuously kept at the required temperatures to prevent growth of microorganisms. The temperature of storage and transportation for refrigerated and/or frozen products is monitored.
3. Meat and meat products are stored and transported in a manner that minimizes physical damage to packaging and protects the food product from conditions which may cause product contamination.
4. Transportation of meat products takes place in carriers dedicated to food use only. In instances where dual use of carriers may be practiced, procedures are in place to restrict the type of non-food loads to those that do not pose a risk to food loads in the same shipment or to subsequent food loads after acceptable cleaning.
5. There are procedures in place to verify that the shipment of ingredients or meat and meat products was stored and transported in accordance with these regulations prior to its receipt.
6. Provide effective protection from contamination, including dust and fumes.
7. Inspected and uninspected meat must be separated to prevent cross-contamination.



## Manufacturing Controls

### Objectives:

Individuals handling or processing meat and meat products shall establish procedures to ensure that products are handled/processed in such a manner that does not pose a risk to human health, including:

- documentation of handling/processing procedures;
- controls and monitoring required to ensure product safety;
- documentation to show that control procedures were achieved; and
- verification that these procedures are complete and effective.

### Rationale:

It is more effective to ensure product safety by implementing process controls than by testing the finished product. Incorporation and adherence to processing controls enhance product safety.

1. Procedures for handling/processing of meat and meat products should be based on potential food safety hazard(s) associated with ingredients, processing steps and the finished product. These hazards could be of a microbiological, chemical or physical nature.
2. Procedures should identify:
  - hazards requiring control;
  - where these hazards will be controlled;
  - the criteria that need to be met to control the hazards;
  - procedures for monitoring criteria, including record keeping;
  - what action will be taken if the criteria are not met;
  - verification that food safety hazards are controlled.

## Recalls for processors

### Objectives:

Manufacturers and distributors of meat and meat products, whose products are entering the retail/wholesale market, shall have in place a method to effectively recall any lot of product posing a risk to human health, including:

- a product coding system, permanent legible code or lot numbers on package;
- product distribution records and retention of these records for at least one year after expiration date or "Best Before" date, or if there is no expiration date two years after the product was released for sale;
- notification of Health Canada and Regional Health Authority if a recall is initiated.

### Rationale:

A recall is an effective method of removing products from the market when they pose a health hazard to consumers. A product coding system and a product distribution list are essential for identifying products that represent risks to health and their effective removal from the market place.

1. A recall procedure should ensure that the recall of meat and meat products is efficient and can be put into practice at any time. A recall plan should include:
  - person(s) responsible for recall (names, phone numbers);
  - how the recall is to be coordinated and implemented;
  - means of notifying affected customers;
  - means of locating and controlling recalled product;
  - way of assessing the progress and efficiency of the recall.
2. Each prepackaged product should have permanent, legible code markings or lot numbers on the package. The code should identify the meat facility, the day, month and year the product was produced or packaged.
3. Ability to show that all affected product has been identified and removed from the market place. This can be shown by:
  - records of customer names, addresses, phone numbers;
  - records of production, inventory and distribution by lot;
  - verifying that all affected product has been accounted for, based on production, inventory and distribution records.
4. Distribution records should contain the following information:
  - product identification and amount;
  - code or lot number;
  - quantity;
  - customer names, addresses, phone numbers to the initial level of product distribution.

5. If a recall is initiated, notification to CFIA and the Regional Health Authority is required with the following information:

- product name, code markings or lot numbers;
- total quantity of recalled product produced;
- total quantity of recalled product distributed up to this time;
- where recalled product has been distributed;
- quantity of product the customer still has in their possession;
- reason for recall.