

**Listeria In-Depth Audit Form  
(Revision July 2002)**

Establishment Name: \_\_\_\_\_

Est No: \_\_\_\_\_

Establishment Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date(s): \_\_\_\_\_

\_\_\_\_\_

CFIA Review Team Lead: \_\_\_\_\_

Members: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Establishment Representatives: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## General Overview of the Establishment

Categories of activities in the establishment: (slaughter, boning cutting, further processing - cooking, dehydrating, fermenting etc.)

---

---

Types of ready-to-eat products produced:

---

---

Number of Employees: \_\_\_\_\_

Number of Shifts: \_\_\_\_\_

Situation review: Chronology leading to In depth review: include CFIA *Listeria* sampling results for previous and current year.

---

---

---

---

---

Checklist of company programs available for in depth review. Provide comment if not available. Establishments not operating under FSEP must still have prerequisite programs in place as per MOP requirements.

( ) Blueprints

---

( ) Written prerequisite program as per FSEP guidelines (six programs) or MOP

---

( ) HACCP plans (indicate # and existence of forms 1 - 10) or records of critical operations such as smokehouse charts etc.)

---

( ) Company Sanitation test results (TPC and/or *Listeria*)

RTE areas: (brine chillers, packaging rooms, smokehouse areas, finished product coolers)

Non contact \_\_\_\_\_

Contact \_\_\_\_\_

NRTE areas:

Non contact \_\_\_\_\_

Contact \_\_\_\_\_

( ) Raw Ingredient test results (microbiological)

\_\_\_\_\_

( ) Finished product test results (microbiological,  $a_w$ , pH)

\_\_\_\_\_

( ) Other test results (packaging materials, casings, spices, coatings)

\_\_\_\_\_

Additional Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **Blueprints and Process Flow Diagrams**

Tour the establishment: Compare blueprints and plant schematic against actual plant layout and operational use. Indicate if the statements are complete (accurate), if not provide additional information. If establishment is not operating under FSEP assess against MOP requirements.

( ) The blueprints are up to date and reflect actual plant operations.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

( ) The plant schematics from the HACCP plans are accurate and reflect actual plant operations. They delineate raw product handling areas and RTE handling areas.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

( ) From observations made during the plant tour, indicate areas of potential biological cross contamination between raw and ready to eat products or employee flow.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- ( ) Potential sites of biological cross contamination identified on company plant schematics have been listed on HACCP Form 5. (Note the area of the company program where the hazard is controlled).

---

---

---

- ( ) Form 5 controls (previously listed) are satisfactory. (review the specific control measures – are they documented, monitored and effective). For plants not operating under a HACCP system, the company has appropriate documented procedures or training to control hazards.

---

---

---

**Summary and Comments on Blueprint and Plant Schematic:** indicate any unaddressed cross contamination hazards in the plant or comment on adequacy of control measures.

---

---

---

---

---

**HACCP plans and/or production and process review**

- ( ) Review HACCP plans (Focus on HACCP plans for RTE products) and compare with records to determine if formulation and method of preparation is accurate, and process controls (lethality processes, cooling schedules or other critical control points) have been achieved.

---

---

---

- ( ) Review Form 5 for controls associated with handling of RTE following the lethality process. Are the controls documented and satisfactory?

---

---

---

## Prerequisite Programs

Review the establishment's written prerequisite programs. The following sub elements are for reference only. The FSEP manual or MOP should be consulted for complete details. **Sub elements may or may not be reviewed as deemed necessary by the review team. Focus attention mainly on ready to eat product areas. Compare observations made on site with recent company prerequisite records.**

Determine if deficiencies found during company monitoring activities have been appropriately corrected. Determine if records reflect actual conditions observed during operation. Provide comments as necessary. (Key points are intended for consideration and are not necessarily MOP requirements).

### Premises

#### Building Exterior (A 1.1)

( ) There is a program to assess suitability of the building exterior.

---

---

---

#### Building Interior (A 2.1)

( ) There is a scheduled program to assess suitability of the building interior (construction and maintenance).

##### Key points:

- RTE areas are in good condition (no damage, smooth surfaces, sealed, dry)
  - no pooling water in floor depressions, cracks or crevices
  - drains covers and openings in good condition, avoid trough or trench drains in RTE areas
  - floors kept dry during operations in RTE areas
  - pipes and insulation are dry and in good repair, covered with impervious, sanitizable materials
  - doors and windows are tight fitting
  - condensate drain lines from refrigeration units are connected to drains
- 
- 
- 

#### Lighting (A 2.2)

( ) There is a scheduled program to assess suitability of the lighting (maintenance and adequacy)

##### Key points:

- lighting meets program requirements for intensity
  - light shades and insides are cleaned on a scheduled basis
  - lights shades are dry, clean and in good condition
- 
- 
- 

#### Ventilation (A 2.3)

( ) There is a scheduled program to assess suitability of the ventilation.

##### Key points:

- air filters/ fans clean

- intake air is filtered
  - positive air pressure in RTE areas
  - free of condensation
  - employees are trained in procedures to prevent contamination of product or equipment when removing condensation.
  - tools for condensation removal are marked and stored appropriately (away from equipment/product) not in contact with floor or other tools used for floors, sanitized frequently
- 
- 
- 

**Waste Disposal and Inedible areas (A 2.4 and A 2.5)**

( ) There is a scheduled program to assess suitability of waste / inedible containers, waste disposal areas and cleaning of waste containers.

**Key points:**

- no cross contamination between garbage/inedible container cleaning / storage/ flow and edible containers or RTE areas
  - inedible / garbage containers are appropriately marked
  - RTE employees do not handle inedible or garbage containers
- 
- 
- 

**Employee Facilities (A 3.1)**

( ) There is a scheduled program to assess suitability of employee areas (maintained, sanitary, proper supplies, separate areas for hanging RTE and NRTE garments etc.). Records show deficiencies and reflect actual conditions observed during the tour / establishment inspection.

**Key points:**

- employees remove protective clothing before entering employee areas and store separately
  - RTE and NRTE garments are colour coded or otherwise identified to prevent misuse
- 
- 
- 

**Equipment cleaning and sanitizing facilities (A 3.2)**

( ) There is a scheduled program to assess suitability of equipment cleaning facilities and cleaning equipment (designed for intended use, properly maintained (sanitized), prevent contamination).

**Key points:**

- separate washup areas are provided for raw and RTE equipment
  - clean RTE equipment does not cross raw meat areas of the plant
  - equipment wash area must be cleaned and sanitized daily
- 
- 
-

**Water/Steam/Ice Quality and Supply (A 4.1)**

- ( ) There is a scheduled program to assess water quality, water equipment and use (back flow devices, filters, boiler water chemicals, no cross contamination, adequate temperature, pressure, volume)

**Key points:**

- water and ice tested at required frequency and meets MOP requirements
- water is tested from random sites throughout the production area
- ice machines cleaned on scheduled basis
- ice from machines in NRTE areas not used in RTE areas

---

---

---

**Additional Comments** - Note any conditions or procedures relating to the previous subelements which may contribute to the presence of *Listeria monocytogenes* in the plant environment.

---

---

---

---

**Transportation and Storage**

**Food Carriers (B 1.1)**

- ( ) There is a program to assess the suitability of transport containers (design, maintenance) and proper unloading procedures.

---

---

---

**Temperature Control (B 1.2)**

- ( ) There is a program to assess the suitability of incoming and finished product transport temperatures.

---

---

---

**Incoming Material Storage (B 2.1)**

- ( ) There is a program to assess the suitability of storage conditions (temperature, handling) of incoming ingredients and packaging materials.
- 
- 
-

**Key points:**

- ingredients and packaging materials protected from contamination (dust , insects etc.)
  - raw and finished products are not stored in same area unless completely packaged and physically segregated
  - segregation of raw and exposed finished products is maintained in all areas
  - meats stored at 4°C or less
  - meat products do not remain in unrefrigerated areas
  - products prevented from undue rise in temperature during production
  - product handling /packaging rooms 10°C or less
  - packaging materials are unwrapped in a manner than prevents contamination of RTE product or area
  - products (meat, ingredients, liquids, packaging materials) do not accumulate in processing areas
  - keep product handling areas as dry as possible
- 
- 
- 

**Non-Food Chemicals Receiving and Storage (B 2.2)**

- ( ) There is a scheduled program to assess the suitability of storage conditions and handling of non food chemicals (approved, stored, mixed with no cross contamination to food, used by authorized person).
- 
- 
- 

**Key points:**

- containers of non food chemicals handled by personnel working in raw product areas are not handled by personnel working in RTE areas.

**Finished Product Storage (B 2.3)**

- ( ) There is a scheduled program to assess the suitability of storage conditions of finished products. Returns are identified and isolated. Records show deficiencies and reflect actual conditions observed during the tour/establishment inspection.

**Key points:**

- stored at 4°C or less, if frozen -18°C or less
  - written return policy
  - no returns handled in RTE areas or by RTE employees until completely reprocessed
- 
- 
- 

**Additional Comments** - Note any conditions or procedures relating to the previous subelements which may contribute to the presence of *Listeria monocytogenes* in the plant environment.

---

---

---

---

## Equipment

### Design and Installation (C 1.1)

( ) There is a program to assess the suitability of equipment design, construction and maintenance.

**Key points:** for equipment in RTE areas

- equipment in good condition, accessible and easy to clean, no niches, dead ends , crevices, welds or pits, exposed bolts or rivets; that trap debris or moisture
  - no hollow rollers conveyors or packaging film rollers
  - avoid cloth type conveyor belts.
  - directly drained / vented if using water or steam
  - no equipment directly over floor drains
  - prevents contamination of food or packing ingredients during use
  - wheels on truck's racks are shielded to prevent splashing onto equipment or product
  - use of non sanitizable equipment (wooden pallets) is avoided or prevented in areas with exposed RTE products
  - separate forklift or pallet jacks for RTE and raw areas
  - install conveyors at least 18 inches from the floor to minimize contamination
  - clean and sanitize protective covers for use over control panels, motors
  - wipe control panels with disposable sanitized wipes daily before use
- 
- 
- 

### Equipment maintenance and calibration (C 1.2)

( ) There is a scheduled program for the maintenance and calibration of equipment which has an effect on food safety (list frequency, reason). Records show deficiencies and reflect actual conditions observed during the tour/establishment inspection.

**Key points:**

- there is a list of equipment to be calibrated
  - frequencies of calibration and procedures are documented
  - there is a list of employees who are trained for calibration
  - critical calibration limits are known, tests and corrective action documented
- 
- 
- 

**Additional Comments** - Note any conditions or procedures relating to the previous sub-elements which may contribute to the presence of *Listeria monocytogenes* in the plant environment.

---

---

---

---

---

## Personnel

### General Food Hygiene Training and Technical Training, Cleanliness, Conduct / Communicable Diseases / Injuries (D 1.1, D 1.2, D 1.3)

- ( ) There is a program to provide training in personnel hygiene and hygienic handling practices at beginning of employment and updating to all employees (production, sanitation, maintenance, supervisors); and technical training is provided for specific tasks (CCPs, sanitation, maintenance), conduct and reporting of illness.

#### Key points:

- all persons entering RTE areas (including workers, supervisors, maintenance ) have received training
  - hands washed upon entering production area
  - proper handling of any tools, equipment or product that has fallen on the floor
  - clean gloves are sanitized prior to handling RTE contact surfaces or product
  - footwear - waterproof and sanitized upon entering RTE areas
  - protective clothing - changed daily and if soiled, removed when leaving RTE areas or kept strictly separate from NRTE clothing, never worn in washrooms, cafeterias or outside of plant; disposable gloves, aprons, sleeves are used in RTE areas
  - NRTE equipment, wooden pallets are not permitted in RTE areas
  - if NRTE employees (including maintenance) are required to work in RTE areas, they change protective clothing including hairnets, sanitize helmets, boots, hands etc.
  - maintenance is trained to avoid cross contamination from tools in RTE areas (avoids placing maintenance tools on RTE equipment surfaces/ equipment that has been repaired or adjusted by maintenance is cleaned and sanitized prior to use
- 
- 
- 

## Sanitation and Pest Control

### Sanitation Program (E 1.1.1 and E 1.1.2)

- ( ) There is a program to ensure that all equipment and areas are cleaned and sanitized. Procedures during production are specified and sanitation procedures do not contaminate food or packaging materials.

#### Key points:

- area is prepared prior to cleaning: remove packaging materials / food products, cover electrical panels, disassembly of equipment
- sanitation personnel have received training in sanitation, follow proper procedures and sanitation procedures are verified by trained personnel or QC
- sanitation program includes:
  - frequency of each area or equipment to be cleaned,
  - special instruction (disassembly, clean with equipment running)
  - cleaning equipment to be used
  - chemicals and concentrations used, temperatures, contact times
  - the main steps for cleaning: precleaning, pre rinse, cleaning, rinse, sanitizing, final rinse if needed
- when possible run equipment during cleaning and sanitizing to ensure all surfaces are exposed to cleaning agents
- chemicals used are approved and used in accordance with manufacturers instructions; use is validated by trained personnel or QC
- foaming sanitizers are used for effective coverage and retention
- equipment and environment is allowed to DRY completely after mid-shift or end of day cleaning
- use dry cleanup methods for mid shifts sanitation. Specific procedures for mid shift cleanup are described in sanitation program
- use of high pressure hoses and excessive water are avoided in RTE areas

- cleaning tools, squeezes, brushes etc. are sanitized (daily) and appropriately stored (hang to dry or store in sanitizing solution of 1,000 ppm quaternary ammonia compound; do not use mops or cleaning equipment that will not completely dry between uses
  - hoses or other cleaning tools for NRTE not used in RTE areas; store separately
  - separate sanitation crew for cleaning RTE areas or clean RTE areas first or change clothing, sanitize footwear before cleaning RTE areas
  - equipment not used for more than 24 hours is resanitized prior to use
  - non contact surfaces are cleaned at acceptable frequencies
  - foot baths are **cleaned** daily, replenished as necessary and monitored for effectiveness
  - hand dip sanitizers are cleaned daily, replenished as necessary and monitored for effectiveness
  - protective clothing (plastic aprons) stored clean and sanitized daily in RTE areas and allowed to dry completely; use of disposable plastic aprons is preferable
  - resanitize after removal of condensate above product contact areas
  - remove water from floors after cleanup without splashing
  - cleaning crew equipment is properly cleaned, sanitized and dried after use
  - never use high pressure hoses to clean a blocked drain, thoroughly clean and sanitize area following drain cleanup
  - avoid access to NRTE areas if responsible to clean RTE areas
  - remove protective clothing and store in a designated area before using employee facilities
  - store brooms and squeezies for floors with handles up
  - store equipment for overhead condensation removal with handles down (but not in contact with floor)
  - store hoses off the floor after cleanup and remove cleanup hoses from area if possible
  - brine chillers are cleaned and sanitized at a scheduled frequency
  - use disposable wipes moistened with sanitizer to wipe and remove scrapes/juices from RTE handling equipment during operations
  - wiener peelers and/or slicers are difficult to clean and may occasionally need heat pasteurization to remove microorganisms from hidden areas
  - contain "wet" RTE processes such as mold knocking, removal of cook - in bags from other RTE process
  - refrigeration units cleaned and sanitized on a regular schedule
  - refrigeration units are included in establishment microbiological sampling plans
- 
- 
- 

### E 1.1.3

( ) Operations do not begin until sanitation requirements met.

#### Key points:

- corrective action of deficiencies is taken prior to operations
  - final re-verification is done prior to operations allowed to start
  - microbiological tests are used to validate effectiveness of program
  - pre-operational sanitation inspection conducted just prior to production; equipment is not assembled for production until pre-operational inspection is complete
- 
- 
- 

### Pest Control Program (E 2.1)

( ) There is a program to ensure prevent and control pests in the establishment.

#### Key points:

- all areas of the establishment are monitored (storage areas, welfare, maintenance)
- all entrances are trapped

monitoring includes rodents and insects

---

---

---

**Recall Program (F 1.1.1, F 1.1.2 and F 1.2.1)**

( ) The company investigates consumer complaints, has a recall program plan, identifies lots of product by date or code, maintains records of all product distributed.

---

---

---

**Final Report:**

A final report will be completed by the In-depth review team leader covering the above subject areas and shall include recommendations for action to be taken. The report is be copied to the Inspection Manager, Area Program Network Chief and Chief Meat Processing Inspection Programs for their further distribution.