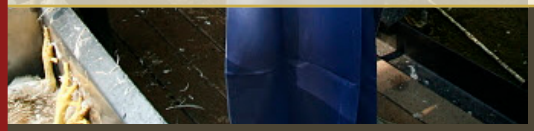
Mobile Poultry Processing Unit

Farm & Food Safety Management Guide

For small-scale poultry producers and processors using a Massachusetts-inspected mobile poultry processing unit or stationary on-farm facility

Prepared by the New England Small Farm Institute & New Entry Sustainable Farming Project



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Preface

While the market for locally grown pastured poultry grows steadily, lack of suitable processing options keeps many small-scale producers from this promising on-farm enterprise and market niche. Throughout the US, farmers and service providers are exploring use of "mobile poultry processing units" (MPPUs) – a processing option that lets small-scale producers process poultry on their own farms and market their products in their own states. Not surprisingly, regulatory considerations vary widely. In Massachusetts, farmers and service providers have worked together to design, build and license an MPPU model that meets rigorous state and local regulations.

This MPPU Food Safety Management Guide is designed to inform and support Massachusetts' small-scale producers – those raising and processing fewer than 20,000 chickens or 5,000 turkeys each year – in the safe use of a Massachusetts-licensed MPPU.

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Safe Food Handling Plan

The purpose of the Safe Food Handling Plan is to ensure that the products – whole raw poultry and giblets offered for sale by Massachusetts' small-scale poultry producers using a Massachusetts-licensed mobile poultry processing unit – are wholesome and processed under clean and sanitary conditions, and that the operation itself does not result in environmental harm.

The MPPU Safe Food Handling Plan begins with a clear description of the specific foods to be produced (whole raw poultry and giblets) and a flow chart that includes each step of the food production process.

These are followed by the heart of the Plan:

- **Good Manufacturing Practices (GMP's)** that describe proper practices for safe and sanitary handling of foods (what you and your personnel have to do)
- **Standard Operating Procedures (SOP's)** and **Sanitation Standard Operating Procedures (SSOP's)** that describe the actual steps you will take each day to insure sanitary food handling and general hygiene practices (how you will perform activities that ensure sanitary food handling and facility cleanliness)
- **Hazard Analysis Critical Control Point (HACCP)** – a food safety management system that helps processors identify and control food safety hazards in their operations.

While HACCP is widely regarded as the heart of a Safe Food Handling Plan, it is built on the foundation of carefully considered GMP's and SOP's.

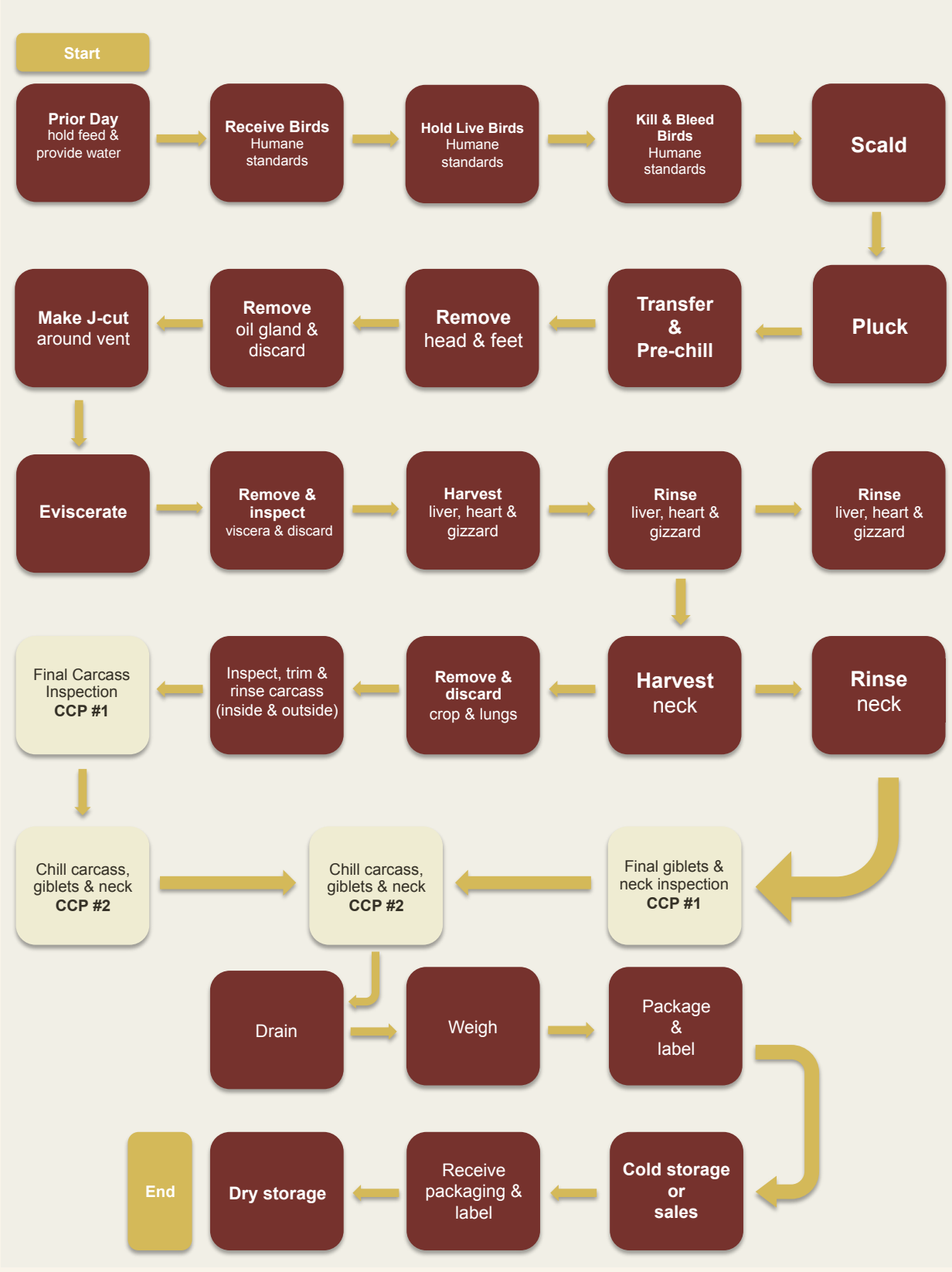
Mobile Unit Processed Food Products
The Basics

Common name	Fresh, whole raw poultry and giblets
Uses	To be cooked by consumers for in their own dining rooms or establishments
Packaging	Plastic bags or other approved methods. (Vacuum packaging is not permitted by MDPH.)
How sold	Fresh or frozen. If fresh, product must be picked up within four hours of slaughter by consumer or held at < 41 degrees for no more than four days.
Where processed	Processed on producers own farm, utilizing a Massachusetts Mobile Poultry Processing Unit
Where & to whom sold	Product may be offered for sale at the producer's own farm or farm stand and at other approved locations, directly to "household consumers, restaurants, hotels or boarding houses that purchase whole raw poultry for use in their own dining rooms or in the preparation of meals for sale direct to consumers." Sales to third parties, such as retailers or outside farm stands, is not permitted. Refer to Poultry Processing Inspection Act §464 (c)1(d).
Labeling	<u>Label must include:</u> 1. Producer or processor's name and address 2. Slaughter date 3. "Exempt P.L. 90 -492" 4. Safe handling instructions

Mobile Unit Processed Food Products
The Basics

Product additives	No non-meat food ingredients, binders or extenders No spices or flavoring No preservatives or acidifiers
Water used in processing & sanitation	All water used on the MPPU in processing, cleaning and sanitation, in chilling tanks and ice manufacture, and as otherwise may be used in the production of whole raw poultry carcasses and giblets, shall be potable.
Cleaning & sanitation agents	Approved cleaning agents (soaps & detergents): all cleaning agents must be biodegradable, permitted for use in organic processing facilities, and used in prescribed concentrations and methods. Approved sanitizing agents for use on food contact surfaces must be biodegradable, permitted for use in organic processing facilities, and used in prescribed concentrations and methods. Recommended: Simple Green Required: Clorox (Mix to 50 ppm for surfaces.) Prohibited: Hydrogen peroxide, quaternary ammonia; other materials not approved for use in certified organic processing.
Equipment maintainance agents	Any agents used in equipment maintenance (whether such equipment is located on the MPPU or otherwise used in the production of whole raw poultry carcasses and giblets), including any lubricants applied to equipment surfaces subject to corrosion after final cleaning, rinse and sanitation, must be food grade and permitted for use in organic processing facilities. Required: (provided with unit) Prohibited: n/a
Environmental considerations	The unit must be managed in a manner that protects the environment, including surface, groundwater and soils. Please refer to MPPU Good Manufacturing Practices #9, page 10, and MPPU Processing Water & Solid Waste Management Protocol & Practice Log and Appendix.

Food Production Process Flow Diagram



Good Manufacturing Practices

The MPPU Good Manufacturing Practices (GMPs) describe what you need to do to "manufacture" safe and wholesome food for your customers. While the Massachusetts' inspected MPPU is designed to support sanitary processing conditions on the unit, your own "processing environment" extends well beyond this to your farm. It includes the people and the buildings, grounds, equipment, and conditions on your farm site. The following GMPs address all of these areas. They are designed to help you create a processing environment that can meet stringent regulatory requirements for the safe and sanitary processing of a potentially hazardous food.

1. Provide Training for Processing Personnel

Design and implement an effective Personnel Training Program. Your program must include information, demonstration, opportunities for supervised practice, and documented proficiency in the following areas:

A. Personal health assessment and hygiene practices (GMP 2).

B. Safe and humane poultry processing and handling. (In 2009, provided as separate document)

C. Proper cleaning and sanitizing protocols (GMP 3-8).

D. Safe and effective processing waste management (GMP 9).

E. All aspects of SOP/SSOP & HACCP program implementation, including recordkeeping.

2. Establish Health & Hygiene Policies for Processing Personnel

Make certain that you and your personnel have the knowledge, skills and attitude necessary to protect your poultry products from contamination by food handlers. This is especially important because poultry products support the rapid growth of microorganisms and are recognized as a "potentially hazardous food." Adopt written Personnel Health & Hygiene Policies and provide mandatory training in personal health & hygiene practices before you and your personnel begin to process poultry. Consider attending a ServSafe® or similar food safety training program to insure that you are well informed about safe food handling.

Your Personnel Health & Hygiene Policies and Training Program must address:

A. Personal Health. Personnel should be dismissed from the processing environment if they:

- Have a food-borne illness
- Show symptoms of a stomach or intestinal illness or jaundice
- Have a sore throat or temperature
- Have an infected wound or cut
- Live with or are exposed to a person who is ill

B. Personal Cleanliness. You and your personnel must discuss the critical importance of general personal cleanliness. Ideally, you and they should shower and shampoo before work. (Dirty hair, for example, is a prime source of pathogens.)

C. Hygienic Hand Practices. Hand washing is the most important aspect of personal hygiene for food handlers. Train personnel to follow these steps:

1. Wet hands with running water as hot as you can comfortably stand it (at least 112° F) and apply soap.

2. Vigorously scrub hands and arms for at least ten to fifteen seconds. Pay special attention to cleaning between fingers and under fingernails.

3. Rinse thoroughly under hot running water.

4. Dry hands with a single use paper towel.

5. Use a paper towel to turn off the faucet and to open the bathroom facility door.

6. Wash hands frequently when handling live or processed poultry or viscera, as well as before starting work and after:

    - Using toilet facilities
    - Handling processing by-products or trash
    - Touching hair, face or body, including an open sore
    - Sneezing, coughing or using a tissue
    - Handling chemicals that might affect food safety
    - Touching dirty clothing, work aprons, work surfaces or anything else that could contaminate hands, such as unsanitary equipment, work surfaces or cleaning tools.

Gloves, if used, should be disposable and changed when they become soiled or torn, before changing tasks, and at least every four hours during continued use. Hand dips are optional but not required. Nail polish should be prohibited; nails should be clipped short.

D. Proper Work Attire. Your and your processing personnel should:

- Wear clean clothing. If possible, change into clean clothes at the processing site.
- Wear a clean hat or other hair restraint. Hair restraints serve two purposes: they keep you from touching your hair and keep your hair away from food. Personnel with long beards should wear beard restraints.
- Remove jewelry from hands and arms. Jewelry provides a good host site for pathogens and may pose a hazard when working around equipment.
- Wear appropriate, clean boots or close-toed shoes with non-skid soles. Consider providing step-in shoe sanitizing "stations" at points of entry to the MPPU.

3. Create & Maintain a Clean Processing Environment

Establish grounds and building maintenance practices that provide a clean and wholesome processing environment.

A. Set up or arrange your site, including the MPPU to allow easy and direct movement of your birds to the holding area and the MPPU, and easy and direct movement of chilled, packaged carcasses from the MPPU to your on-site refrigerated storage areas.

B. Maintain the following areas in a clean, well-drained condition and free of litter:

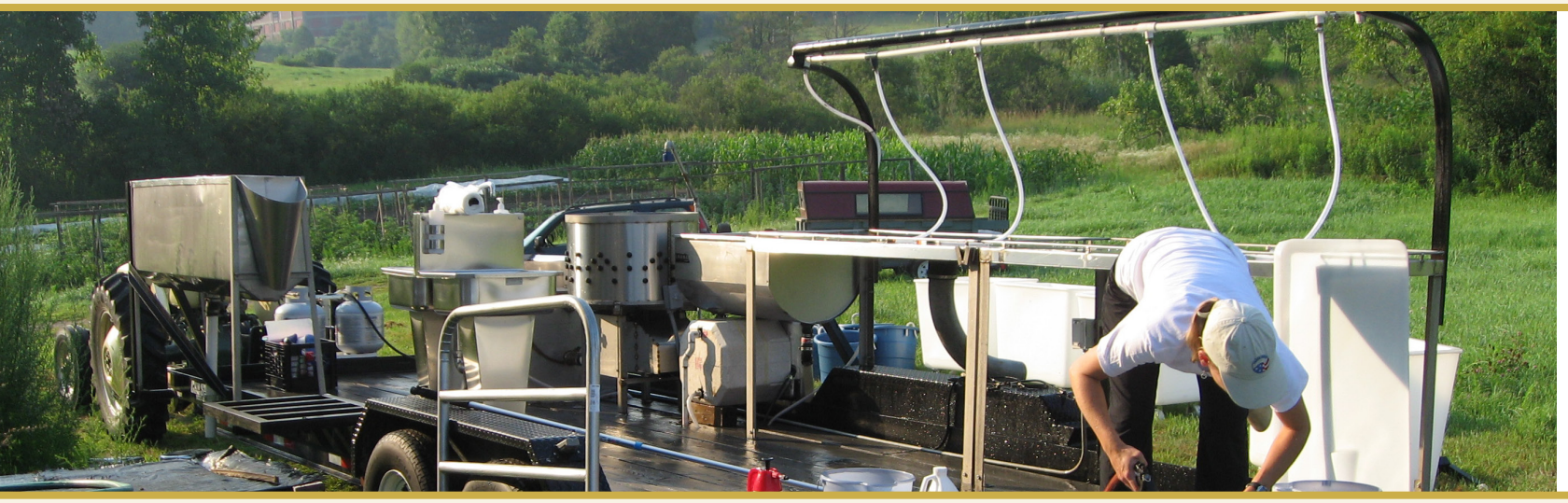
- Poultry holding facilities and adjacent areas.
- The MPPU location (including water and electric hook up).
- Buildings or sheds used for: storage of processing/handling supplies, equipment and finished product (i.e., refrigeration or freezing, and adjacent areas).
- Facilities used by personnel for personal hygiene (i.e., toilets, hand-washing, supplies and clothing) and adjacent areas.
- On-site areas used for processing waste management (i.e., fields or pastures used for wastewater disposal and compost areas used to process solid wastes).

C. Frequently inspect all outside areas of your site for trash, blood, feathers, fecal material, etc., all of which must be promptly and properly removed and disposed of.

D. Keep trashcans, if any, tightly covered.

E. Maintain adequate dust control throughout your site.

F. Keep the buildings and sheds you use for storing processing supplies and product, and for maintaining personal hygiene of your personnel, in good, easily "cleanable" repair.



4. Control Pests: Inside & Outside

Install and maintain adequate pest control measures throughout your processing environment.

A. Keep all areas free of "harborages" for rodents; maintain "clean zones" in and around all storage and processing areas.

B. Install measures to prevent wild birds, domestic and wild animals, and insects from entering your processing environment.

C. Prevent wild birds and other pests from nesting in the processing environment.

D. Inspect all areas at least monthly for presence of rodents and all other pests.

E. Establish and maintain rigorous on-farm and farm-to-farm bio-security policies and practices.

5. Control Access

Place signs around your site to provide strict access control in your processing environment. Discourage non-personnel from entering your poultry rearing areas (a bio-security issue) and processing environment in general, and do not permit them on the MPPU when in use. Limit access to poultry holding areas, the MPPU, and on-site storage/refrigeration areas to trained personnel during processing operations. Personnel should not move back and forth between the MPPU's slaughter and evisceration areas, between the unit and poultry holding and on-farm refrigeration/storage areas, or out of and back into the processing environment without removing gloves and aprons when leaving, and without washing hands upon return. Prohibit smoking, eating, drinking, and chewing guam and tobacco in the processing environment when processing is taking place.

6. Provide & Protect Potable Water

Provide a supply of safe-to-drink, potable water that is sufficient (quantity and pressure) to support all processing, chilling, cleaning, sanitizing and personnel hygiene needs, including ice manufacture. (Sources of potable water include municipal water, private wells that are properly managed and regularly tested, closed portable water containers filled with potable water and bottled drinking water.) In addition:

A. Provide hot water (112° minimum) for personal hygiene (including hand washing) and equipment cleaning.

B. Provide approved, food-grade quality hoses and pipes for all water used for processing, cleaning and personal hygiene.

C. Install and maintain measures to prevent contamination of water used in processing, cleaning and personal hygiene; prevent cross-contamination between potable and non-potable water with water system backflow prevention devices (air gaps, vacuum/pressure breakers or check valves).

7. Maintain & Securely Store Processing Equipment & Utensils

Maintain your processing equipment and utensils in good condition, so that they can perform effectively and can be easily cleaned and sanitized. Store them securely when not in use.

A. Conduct pre- and post-operation inspections of all processing equipment and utensils, checking for cleanliness and signs of rust, wear, damage or other defects. Your equipment inspection checklist should include:

Killing cones	Scalder and plucker	Knives, implements and other utensils	Evisceration and work tables
Chilling and hold tanks	Ice containers	Processing waste collection tubs	Water and propane lines/connections
Cleaning and sanitizing equipment	Hoses	Water backflow devices	Electric outlets
	Wiring	Propane tanks	

B. Repair serious defects and/or perform necessary maintenance before processing begins and prior to storage.

C. Store all equipment and utensils in good conditions in clean, secure storage areas, to prevent damage or contamination of any kind.

8. Provide Secure Storage for Processing Supplies & Materials

Store all supplies and materials used in cleaning, sanitizing, packaging and labeling in clean, secure storage areas, to prevent damage or contamination of any kind. Keep cleaning and sanitizing agents in clearly labeled, secure containers; keep separated from supplies that may come in contact with food.

9. Manage Processing Wastes

Before bringing a Massachusetts-inspected MPPU onto your farm, you will be asked to prepare a Processing Wastewater & Solid Waste Management Plan and receive a site inspection from Massachusetts Department of Agricultural Resources staff. Your plan should describe the steps you will take to manage processing wastes in a safe and environmentally responsible manner. It will insure that:

A. Wastewater, such as water from chilling, cleaning with approved soaps, and rinsing, is properly collected and land applied on biologically active farm hayfields or pastures in a manner that precludes erosion and functions as a safe and appropriate crop nutrient. Such fields or pastures must be located at least 200 feet from any surface water or wells.

B. Solid processing waste, such as poultry feathers, blood and viscera, is properly collected, transported and incorporated into an actively managed agricultural compost pile or windrow. Your proposed compost "recipe" must support active composting, including appropriate bulking materials, moisture content and C:N ratio.

C. Trash, such as discarded containers for supplies, damaged packaging materials and disposable gloves, is properly collected, contained and removed from your processing environment.

Standard Operating Procedures & Sanitation Standard Operating Procedures

Standard Operating Procedures (SOPs) and Sanitation Standard Sanitation Operating Procedures (SSOPs) are designed to prevent the creation of unsanitary processing conditions and insure that food products are wholesome and unadulterated. They describe how to carry out and document safe food handling and personal hygiene practices (GMPs).

1. SOP for Site Management & Pest Control

A. Frequency: monthly, throughout the term of your annual State Slaughter License.

B. Person responsible: Producer-processor or designee.

C. Procedure (see GMP's 3-8):

- Visually inspect processing environment (grounds and buildings, including storage areas and sanitary facilities) for cleanliness and presence of pests. List needed corrective actions.
- Perform corrective actions
- Document, sign and date as required in MPPU Operations Log.

2. SSOP for Personnel Health & Hygiene

A. Frequency: each day of operation.

B. Person responsible: Producer-processor or designee

C. Procedure (see GMP 1 & 2):

- Interview and visually check processing personnel for health and personal hygiene considerations, prior to approving anyone for food handling. Dismiss anyone found unsuitable for work.
- Document, sign and date as required in MPPU Operations Log.

3. SSOP: Pre-Operational Inspection & Sanitation Schedule

A. Frequency: each day, prior to operation
B. Persons responsible: Producer-processor or designee.
C. Procedure:

- Visually inspect all equipment and utensils for cleanliness and operability.
- Clean, rinse and sanitize all product contact surfaces, equipment and utensils, including coolers. If appropriate, test food contact areas for sanitizer residue.
- Document, sign and date as required in MPPU Operations Log.

4. SSOP: Daily Operational Sanitation Maintenance

A. Frequency: each day, throughout operation.
B. Person responsible: Producer-processor or designee.
C. Procedure:

Kill Area

1. If a carcass falls to the floor, pick it up immediately; wash thoroughly before further processing and document.
2. If a piece of equipment or a utensil falls to the floor, wash thoroughly and document.
3. Maintain area in a clean and sanitary condition throughout operation.

Processing Area

1. If a carcass or giblet falls to the floor, pick it up immediately, wash thoroughly before further processing and document.
2. If intestines are nicked during evisceration, thoroughly wash and sanitize all areas and utensils contaminated with fecal matter and document.
3. If a piece of equipment or a utensil falls to the floor, wash it thoroughly and document.
4. Maintain entire area in a clean and sanitary condition throughout the daily operation

D. Document required corrective actions, sign and date as required in MPPU Operations Log when daily operation is complete.

5. SSOP for Chill Tank & Refrigeration Temperature Monitoring

A. Frequency: test chill tank slurry temperatures once per hour of operation; test and record refrigerator temperature once per day.

B. Person responsible: producer-processor or designee.

C. Procedure:

- Use a digital thermometer to test chill tank ice slurry temperatures. The target temperature for chill tank slurry is between 33° and 40°F. Add ice as necessary. Document, sign and date as required in MPPU Operations Log.

- NOTE: The chill tank must reduce the temperature of carcasses to 40° F or less within 4 hours of evisceration. See HACCP Critical Control Point #2. Use a digital thermometer to measure internal carcass temperatures of 2% (or a minimum of 5) of poultry. Document, sign and date as required in MPPU Operations Log.

- Use a digital thermometer to test pre-chill tank water. Add cold water frequently to maintain as cool as possible. Ice water slurry is not required.

- Use a max-min thermometer to measure refrigerator storage temperatures. Document, sign and date as required in MPPU Operations Log.

- NOTE: You must hold fresh product at 33°- 40° F until delivery. Stored at these temperatures, product shelf life is 4 days. Freeze or discard product if held for more than 4 days.

- Maintain Farmers' Market cooler temperatures at 33° - 40° F for fresh product. Record cooler temperatures at start and end of the day. Document, sign and date as required in MPPU Daily Operations Log.

6. SSOP: Post-Operational Sanitation Schedule

A. Frequency: each day, after operation.

B. Person responsible: Producer-processor or designee.

C. Procedure:

Kill Area

1. Pick up feathers & other matter; deposit into receptacle for inedible material.

2. Briefly pre-rinse all dirty areas with warm water; start the process at the top and work all material down to the floor.

3. Apply detergent as directed.

    - Rinse all equipment from top to bottom.
    - Inspect and re-clean any missed areas.
    - After cleaning/rinsing work areas, apply sanitizer to all contact surfaces.
    - Squeegee standing water to the floor.

Processing Area

1. Pick up any pieces of bones, fat, meat or other matter and deposit into container for inedible material.

2. Disassemble all equipment and place parts in their designated tubs.

3. Briefly pre-rinse all soiled areas with warm water. Start the process at the top and work all material down to the floor.

4. Apply approved soap as directed.

5. Rinse all equipment from top to bottom.

6. Inspect and re-clean any missed areas.

7. After equipment and work areas have been cleaned, apply sanitizer to all contact surfaces.

8. Squeegee any standing water on floor to drainage areas.

9. Remove, clean and sanitize any waste conduits or drains.

10. Apply edible oil to all surfaces that are subject to corrosion.

Hazard Analysis Critical Control Point Plan

Food safety is a critical concern for your business and your customers. The failure to control a food safety hazard in your operation can make people sick and result in undesirable legal and economic consequences for you and your industry. The adoption of a Hazard Analysis Critical Control Point (HACCP) plan for poultry...as mandated by the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA/FSIS) is a valuable tool that can help you to produce a safer food product.

A Hazard Analysis Critical Control Point (HACCP) system is a food safety system that helps processors identify and control their operation from the time they receive raw materials and ingredients until they distribute their final product…. [It] focuses on thinking about and eliminating, minimizing, or reducing food safety hazards to an acceptable level. A HACCP program will reduce the likelihood that your operation will produce an unwholesome food – and save you from economic losses that can result when you must dispose of an unsafe product at the end of the line.

The HACCP process

For the seven-step HACCP system to work, you must have a thorough knowledge and understanding of your process and your product. Beginning with a "hazard analysis" (Step 1), the processor identifies and reviews all potential food safety problems in the production, processing, packaging and distribution of their product. As a result of this analysis, you can target those points in your process that must be controlled to prevent the development or minimize the effects of a food safety hazard. These points in your process are called Critical Control Points (Step 2). Critical Limits are set for each Critical Control Point or CCP (Step 3). The Critical Limits at each CCP are monitored (Step 4) and Corrective Actions (Step 5) are taken if your system is not in control and a food safety hazard exists.

A HACCP plan includes a record-keeping system (Step 6) that helps you demonstrate that the potential food safety hazards in your process are under control. Finally, you will need to have a plan to regularly review the records and your process to verify that your HACCP system is doing what you say it will (Step 7).

Each HACCP plan is unique to a specific food product and processing facility. The plan included in the following pages has been developed for use by Massachusetts' "smallest-scale" poultry producer processors using a Massachusetts-licensed Mobile Poultry Processing Unit (MPPU) to produce whole raw poultry carcasses and giblets for direct-to-consumer sale.

The Seven Steps of HACCP

1. Assess food safety hazards associated with all areas of your product and your process, and describe measures that prevent the hazards.
2. Determine the Critical Control Points (CCPs) – observable and measurable.
3. Establish the Critical Limits (standards) for each CCP.
4. Establish Monitoring Procedures for the CCPs.
5. Establish Corrective Actions to be taken when CCPs are not in control.
6. Establish Record-Keeping Procedures that effectively document the HACCP system.
7. Establish Verification Procedures to determine that the system is working.

Hazard Analysis & Identification of Critical Control Points

Process step	Potential hazard (X-C = cross-contamination)	What control measures can be applied to prevent the hazard?	Is the potential safety hazard significant and reasonably likely to occur?
Receive and hold	Biological: fecal contamination (Salmonella spp.) from birds or infected personnel. Physical: fecal Chemical: none	Withhold feed, provide acidified water prior day. Clean any foreign matter from birds. Prevent X-C. Proper personnel hygiene (GMP 2; SSOP 2). See above.	Yes. Steps to control contamination occur throughout processing process. (see above)
Kill and bleed	Biological: pathogen introduction (X-C) Physical: none Chemical: none	Proper cleaning of cones, equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No
Scald	Biological: pathogen introduction (X-C) Physical: none Chemical: none	Monitor water temperature; change water if / as required.	No
Pluck	Biological: pathogen introduction (X-C) Physical: none Chemical: none	Proper cleaning of equipment, including rubber picker fingers (SSOP 3).	No
Pre-chill	Biological: pathogen introduction (X-C) Physical: none Chemical: none	Monitor water temperature; change frequently (SSOP 5).	No
Transfer	Biological: none Physical: none Chemical: none	Not applicable	No
Remove head and feet	Biological: accidental X-C Physical: none Chemical: none	Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No
Remove oil gland	Biological: pathogen introduction (X-C) Physical: none Chemical: none	Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No

Process step	Potential hazard (X-C = cross-contamination)	What control measures can be applied to prevent the hazard?	Is the potential safety hazard significant and reasonably likely to occur?
Make J-cut around vent	Biological: accidental fecal contamination (Salmonella spp.) Physical: none Chemical: none	Proper personnel training (GMP 1); proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No
Eviscerate	Biological: pathogen introduction Physical: none Chemical: none	Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No
Inspect viscera	Biological: none Physical: none Chemical: none	Not applicable	No
Harvest liver and heart	Biological: pathogen introduction Physical: none Chemical: none	Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No
Harvest neck	Biological: pathogen introduction Physical: none Chemical: none	Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No
Remove crop and lungs	Biological: pathogen introduction Physical: none Chemical: none	Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No
Trim carcass/final rinse (inside and out)	Biological: pathogen introduction Physical: none Chemical: none	Trim to remove any foreign matter that may cause contamination. Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2).	No

Process Step	Potential hazard (X-C = cross-contamination)	What control measures can be applied to prevent the hazard?	Is the potential safety hazard significant and reasonably likely to occur?	CCP #
Final inspection: carcass, giblets and neck	Biological: pathogen introduction (X-C from other birds and ice) Physical: none Chemical: none	Trim to remove contamination from foreign matter. Proper cleaning of equipment & utensils (SSOP 3).	Yes	1
Chill carcass, gilbets and neck	Biological: pathogen introduction (X-C from other birds and ice) Physical: none Chemical: none		Yes	2
Drain carcass, giblets and neck	Biological: pathogen introduction Physical: contamination from foreign matter Chemical: none	Proper cleaning of equipment & utensils (SSOP 3). Proper personnel hygiene (GMP 2; SSOP 2). Proper cleaning of equipment and food contact surfaces (SSOP 3).	No	
Package, weigh and label	Biological: pathogen introduction (salmonella ssp.) from birds or infected personnel. Physical: contamination from foreign matter Chemical: none	Include proper cooking instructions on every food label (see MPPU Food Product Description). Wash or trim to remove contamination from foreign matter (Final Inspection/CL 1).	No	

HACCP Record Keeping & Verification Procedures

Process/step CCP	Records	Responsibility	CCP verification
Final Inspection CCP #1	HACCP Final Inspection Logs (carcass and giblets)	HACCP-trained grower-processor or designee	HACCP final inspection logs will be verified each day of use by grower-processor or designee.
Final Inspection CCP #2	HACCP Temperature Log	HACCP-trained grower-processor or designee	HACCP temperature logs will be verified each day of use by grower-processor or designee. Personnel will be retrained each year by grower-processor or designee.

Identifying Critical Limits, Monitoring & Corrective Actions

PROCESS/STEP CCP	CRITICAL LIMIT(CL)	MONITORING PROCEDURE	CORRECTIVE ACTION (CA)
Final inspection CCP #1	No visible foreign matter, zero tolerance for fecal matter and ingesta.	What will be measured? At least 2% of birds (5 minimum) will be monitored for presence of foreign matter and/or ingesta after final rinse and prior to chilling. Where will the CL be measured? Final inspection in the evisceration area. Who will monitor the CL? HACCP trained grower-processor or designee Frequency? For 200 birds or less: 5-bird sample per day.	How will the process be corrected? Trim away any foreign matter. Product disposition? Discard trimmings into container for inedibles. Who is responsible for implementing the CA? HACCP trained grower-processor or designee. Measure to prevent any recurrence? Retrain personnel and adjust process as needed.
Final inspection CCP #2	Internal bird temperature <41 degrees F.	What will be measured? Internal temperature Where will CL be measured? In the carcass cavity. How will CL be measured? Thermal probe. Who will monitor CL? HACCP-trained grower-processor or designee. Frequency? For 200 birds or less: 5-bird sample per day.	How will the process be corrected? Keep chilling until temperature is reached. Product disposition? Reject/discard, chill or freeze. Who is responsible for implementing the CA? HACCP-trained grower-processor or designee. Measures to prevent recurrence? Retrain personnel. Adjust process.

Sample Monthly Log: Farm Site Inspection & Pest Control

(Use to document SOP 1)

DATE (Month/ Year)	AREA INSPECTED/ CORRECTIVE ACTIONS NEEDED (IF ANY):	Initial/ Date:	NOTES/ CORRECTIVE ACTIONS TAKEN:	Initial/ Date:
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			

Once each month of permit duration:

1. Producer-processor visually inspects processing environment (grounds & buildings, including storage areas & sanitary facilities) for cleanliness and presence of pests and trash, **once each month** during period covered by the State Slaughter License. Lists needed corrective action and documents (initials log).
2. Producer-processor performs corrective actions and documents (initials log).
3. Producer-processor verifies, signs and dates each monthly log. Most recent copy to be filed with MPPU Use Report.

Signed/Date_____

Sample Daily Log: Personnel Health & Hygiene Assessment

(Use to document SSOP 2)

Farm:
Date:
Time:

NAME:	ASSESSSED BY:	PASS / FAIL, COMMENTS	INITIAL / DATE (Both parties)
1			
2			
3			
4			
5			
6			
7			
8			

Use additional sheets if required.

Once each day of operation, personnel checks for following and initials log:

- Presence of food borne illness; symptoms of a stomach or intestinal illness
- Sore throat or temperature
- Infected wounds or cuts
- Household member with person who is ill
- Personal cleanliness (hair, work clothes, shoes)
- Presence of jewelry; need for hair or beard restraint
- Working knowledge of proper hygienic hand practices

Producer-processor verifies, signs and dates.

Signed/Date_____

Sample Daily Log: **Pre- & Post-Operational Inspection & Sanitation**

(Use to document SSOPs 3 & 6)

Farm:
Date:

	PRE-OP INSPECTION / CLEAN-UP: (Initial)	CLEAN / RINSE / SANITIZE: (Initial)	POST OP INSPECTION / CLEAN-UP / STORAGE: (Initial)	NOTES / CORRECTIVE ACTIONS REQUIRED and COMPLETED
		Pre-Op Post-Op		
Killing cones		/		
Scalder & plucker		/		
Knives, implements & utensils		/		
Evisceration & work tables		/		
Chilling & holding tanks, tubs, etc.		/		
Cleaning & sanitizing equipment		/		
Pipes; hoses; water, propane & electric systems, backflow devices; floor, etc.		/		
Sanitary facilities		/		

For each day of use, both before (pre-operation) and after (post-operation) use:

1. Personnel visually inspect all water, electric and propane systems, and all processing equipment utensils, for cleanliness and operability, and documents (initial log). Post-operation: picks up feathers and other matter; removes receptacles for inedible material and trash. Document.
2. Personnel clean, rinse and sanitize all product contact surfaces, equipment and utensils. Repeats if necessary. Post-operation: applies edible oil to all surfaces subject to corrosion. Stores supplies. Document.
3. Producer-processor verifies, signs and dates. Signed/Date:_____

Sample Daily Log: Operational Sanitation Maintenance

(Use to document SSOP 4)

Farm:
Date:
Time:

POTENTIAL HAZARD / EVENT* (IF ANY)	CORRECTIVE ACTION** REQUIRED & COMPLETED	SIGN and DATE

Examples:

1. Hazard: carcass falls to the floor.
   Corrective action: immediately pick up carcass and wash / rinse thoroughly before further processing. Document in Log.
2. Hazard: poultry intestines are nicked during evisceration, contaminating evisceration table and utensils with fecal matter.
   Corrective action: wash, rinse and sanitize processing area and utensils. Document in Log.
3. Hazard: area of unit or piece of equipment becomes contaminated.
4. **Corrective Action: Clean, rinse and sanitize, as per Pre-Operational Sanitation Procedures. Maintain clean and sanitary conditions throughout the daily operation. Document corrective action in Log.

Producer-processor verifies, signs and dates.

Signed/Date_____

Sample Daily Log: Chill Tank & Refrigeration Temperature Monitoring

(Use to document SSOP 5)

Farm:
Date:
Time:

CHILL TANKS	TIME	TEMP.	CORRECTIVE ACTIONS	SIGNED

REFRIG.	DATE	TEMP.	CORRECTIVE ACTIONS	SIGNED

COOLER	DATE	TEMP. START / END	
1			
2			
3			

1. Personnel use digital thermometer to test temperature of chill tanks once each hour of operation. Maintain temperature between 33° and 40° F.
2. Personnel use min-max thermometer to test temperature of refrigerator used to hold fresh poultry once each day in use. Maintain temperature at <40° F.
3. Personnel monitor Farmers' Market cooler temperatures at 33° - 40° F. Add ice as required. Document temperatures at start and end of day.
4. Producer-processor verifies, signs and dates.

Signed/Date_____

Sample Daily HACCP Log: Poultry Carcass & Giblets Final Inspection

(Use to document CCP #1, Inspection)

Farm:
Date:
Time:

Sample	Inspected by:	Pass	Fail	Corrective Action *	Re-inspected by:	Pass	Fail**	Signature
1								
2								
3								
4								
5								

NOTE: 2% of product must be tested and documented. For 200 or fewer birds, a sample of at least five is required. Use additional forms if required.
Critical Control is necessary to reduce a biological hazard – the rapid growth of pathogens introduced by physical presence of fecal matter or ingesta.
* Corrective Action: Trim to remove contamination from foreign matter.
**Critical Limit: Zero tolerance for fecal matter and ingesta. No visible contamination.

1. Personnel manage final inspection of 2% (minimum of 5) product samples and document.
2. Producer-processor verifies, signs and dates.

Signed/Date_____

Sample Daily HACCP Log: Poultry Carcass & Giblets Internal Temperature Monitoring

(Use to document CCP #2, Chilling)

Farm:
Date:
Time:

Sample	Test #1	Tested by:	Pass	Fail	Corrective Action *	Test #2	Tested by:	Pass	Fail**	Signature
1										
2										
3										
4										
5										

NOTE: 2% of birds must be tested. For 200 or fewer birds, a sample of at least five is required. Use additional forms if required.

Critical Control is necessary to reduce a biological hazard – the rapid growth of pathogens introduced by X-C from other birds or from contaminated water or ice.

*Corrective Action: Keep chilling until critical limit is reached. Monitor chill tank temperature (at least once / hour) and document. The target temperature for chill tank slurry is between 33° and 40° F. Add ice as necessary. See SSOP 5 for Chill Tank and Refrigeration Temperature Monitoring.

**Critical Limit: Internal carcass temperature <40° F within four hours. If critical limit is not reached, product may not enter commerce. Cook or freeze immediately for personal use or discard.

1. Personnel monitor and document product internal temperature and chill tank temperature.
2. Producer-processor verifies, signs and dates.

Signed/Date_____

MPPU Farm-to-Farm Bio-Security Protocol & Practices

(Use log to document Good Manufacturing Practices 3,4 & 5

Introduction

"Bio-security means doing everything you can to protect your birds from disease. As a [producer-processor], keeping your birds healthy is a top priority. Your birds can become sick or die from exposure to just a few unseen bacteria, viruses, or parasites. In a single day, these germs can multiply and infect all your birds…."

This quote, and most of the following information, is taken from the USDA Animal and Plant Health Inspection Service (APFIS) brochure: *Backyard Bio-security Practices to Keep Your Birds Healthy*.
Visit *www.aphis.usda.gov/animal_health/* and *www.ma.gov/agr* to learn more.

APHIS offers several "Bio-security Tips" to prevent poultry disease. They are as effective for keeping your processing environment clean and sanitary as for use in your poultry rearing areas. They include:

1. Keep Your Distance. Restrict access to your birds. Allow only people who care for them to come in contact with them. Keep a clean buffer zone around the area where they are housed or grazed.
2. Keep it Clean. Set aside work clothes and shoes that you and others will wear only around your birds. You can scrub shoes with a long-handled scrub brush dipped in a solution of household bleach (sodium hypochlorite 6 percent. Mix ¾ cup per gallon of water.) Consider installing a pail and brush near both entrances of the MPPU.
3. Don't Haul Disease Home. "Car and truck tires, poultry cages and equipment can harbor "germs." Be sure to disinfect these items – including tires of the MPPU and the truck that transports it -- before allowing them on your property. Scrub them with disinfectant and rinse at the entrance of your farm.
4. Don't Borrow Disease from a Neighbor. Do not share birds, equipment, tools or poultry supplies with other bird owners. If you must, clean and disinfect them before bringing them onto your property – and clean and disinfect them before returning them. Never share items such as wooden pallets [or other items that are porous] and cannot be adequately cleaned and sanitized.

Cleaning and disinfecting is one of the most important bio-security practices. You must thoroughly clean and scrub objects before applying disinfectants or sanitizers. They cannot work on top of caked-on dirt. Rinse well before applying a sanitizer with a brush, sponge or spray and allow adequate contact time.

Sample MPPU Farm-to-Farm Bio-Security Practices Log

FARM:
DATE:

1. Processing personnel who raise poultry have changed into clean work clothing and shoes (or disinfected shoes) before entering this farm.
2. Car, truck and MPPU trailer tires have been properly disinfected before being allowed onto this farm.
3. Equipment, tools and/or supplies borrowed from or shared with other poultry producers, if any, have been carefully cleaned and sanitized before being brought onto this farm.

The MPPU Farm-to-Farm Bio-Security procedures described above were implemented on the above farm on this date.

Signed: _____
Producer-processor MPPU Use Date

Sample MPPU Processing Water & Solid Waste Management Protocol & Practices Log

Good Manufacturing Practice 9 (see also, Appendix A to this document)

A. Processing Location:

The unit was parked on (check one):
_____ biologically active grass, farm hayfields or pasture.
_____an agricultural compost pad provided with a biologically active buffer strip, located at least 100' from active cropland.

B. Water:

_____ Water from pre- and post-process cleaning/rinsing and hand sinks not contained (i.e., was allowed to flow directly to an actively growing grassed area), was discharged in a manner that would not cause erosion or impact surface water, groundwater or other resource areas. No harsh cleaning and disinfectant chemicals were introduced into such rinse water; prior to commencement of post-process rinse, all solid waste (e.g., viscera, offal, feathers) was physically removed from equipment and food contact surfaces.

_____ Water generated during processing (i.e., from scalder, plucker and evisceration tables, or from initial cleaning of contact surfaces that contain solids) was incorporated into a compost pile (see B, below).

Water contained in chill tanks was (check one):
_____ applied to actively growing agricultural land verified by MDAR during site inspection as adequate to accept this application; or
_____ discharged directly into a compost pile (see B, below). Such discharge shall not cause the water to migrate beyond the compost pile boundary.

Completed by: _____
Signed: _____
Producer-processor MPPU Use Date

C. Solid Waste: Solid waste, e.g., feathers, blood, viscera and inedible processing byproducts have been properly collected and disposed of as follows (check one):
_____Placed in an on-site dumpster with regularly scheduled pick-up for transport to a licensed solid waste facility.
_____Incorporated into an approved active or newly constructed agricultural compost pile (minimum 4'wide x 5' high, and 6'long per 100 birds). Also see Appendix A to this document.

Completed by: _____
Signed: _____
Producer-processor MPPU Use Date

Sample MPPU Processing Water & Solid Waste Management Protocol & Practices Log

Good Manufacturing Practice 9, page 2

D. Trash: All trash generated by poultry processing activity on this date, e.g., paper towels, discarded containers or packaging materials, and disposable gloves, has been properly collected, contained and removed from the processing environment.

Completed by: _____

Signed: _____

Producer-processor MPPU Use Date

We'd like to hear your thoughts!
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For more small-scale poultry processing guides and other resources, please visit:
http://nesfp.nutrition.tufts.edu/training/mobilepoultry.html

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