U.P. FOOD EXCHANGE
growing local food systems

Food Safety Manual

2015

Farm Name: _____

Legal Farm Address: _____

_____

Owner: _____

Phone: _____

Email: _____

Food Safety Manager: _____

(if separate from owner)

Phone: _____

Email: _____

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Scope of Food Safety Program Statement

The Food Safety Manual

The following manual defines specific, measurable steps taken to reduce the risk of microbial, physical, and chemical hazards from contaminating our farm products. This food safety manual is designed to address the guidelines in the United States Department of Agriculture Good Agricultural Practices/Good Handling Practices (GAP/GHP) Audit Verification Checklist. Included in this manual are:

- General information about our farm
- Standard Operating Procedures (SOPs) outlining the policies and procedures for our operation
- Current documents and records showing evidence that the food safety plan is being implemented and followed

The UP Food Exchange (UPFE) created this Food Safety Manual as a template for us to change as necessary to fit the needs of our farm. We have adapted this template to accurately reflect the food safety practices used on our farm. The Food Safety Manual is reviewed and updated annually by UPFE and our farm to meet UPFE's needs and reflect any relevant changes to food safety laws, rules, and guidelines.

Food Safety Manager Signature: _____

Signature of person responsible if Food Safety Manager is absent: _____

Notes on using this manual

Bolded and italicized words indicate that a record (log sheet) must be filled out corresponding to the relevant section of the Food Safety Manual

This symbol in the margin indicates a part of the manual that needs to be adapted by each farm

Numbers in these boxes refer to items on the GAP/GHP Audit Checklist

P-1, P-2

Farm Maps

Maps and explanations of the following are included in our Food Safety Manual:

- Entire cultivated property showing buildings, fields, roads, irrigation source, septic system(s), wellheads, etc.
- Labeled field/sections with a name or number. Produce grown in each area is indicated. Acreage is included.
- Surrounding areas, including the direction of drainage.
- Floor plans of the buildings, labeling sinks, chemical storage areas, restrooms, locations of first aid kits, etc.
- Designated break areas (smoking, eating, etc.)
- Packing line/washing area flow diagram. Show where produce is boxed/bagged from field harvest, where product comes into the packing area, and where the finished product goes before it leaves the farm.
- Maps from previous years are included as necessary

Crops

The crops included in the scope of our food safety program are:

Traceability

A traceability plan is implemented so that the source of a product is known (one step backward) and where a product was sent (one step forward). In the event of a recall, every quantity of produce sold can be traced back to when and where it was harvested. This is accomplished by the following:

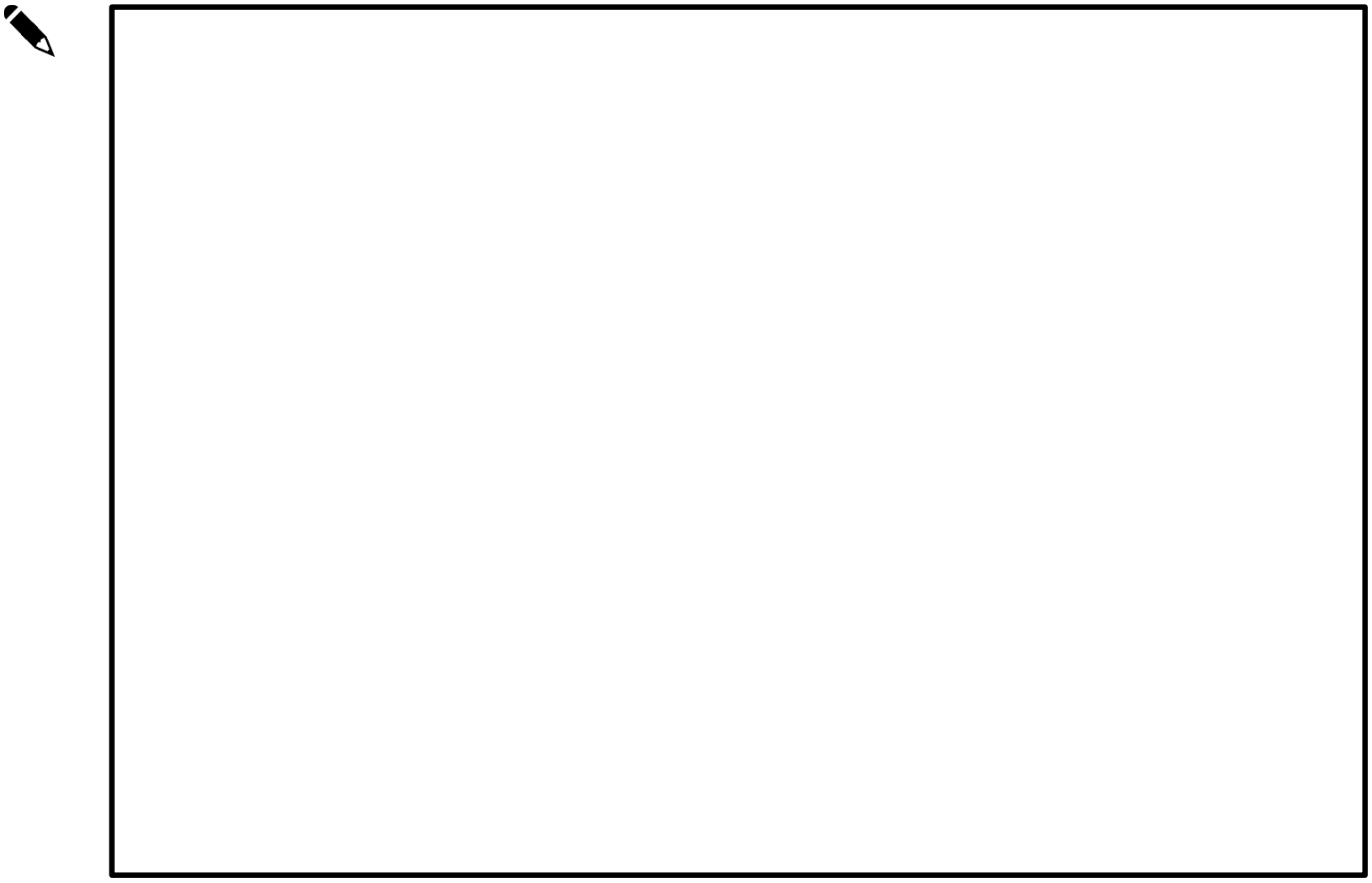
The following information is recorded in the ***Harvest Log***:

- Item
- Field it was harvested from
- Quantity
- Date
- Any further unique identifying information

When leaving the farm, every container of produce delivered has a label with identification information and an accompanying invoice that will identify what the produce is and where it came from. This includes:

- Farm Name
- Item
- Quantity
- Delivery date
- Any further unique identifying information

Examples of labels and an invoice containing identification information are included below.



Recall Program

Policy:

A recall program is used to remove contaminated product from the supply chain after it has left the farm. How recalled products are to be handled will be established on a case-by-case basis with each individual buyer. This information is recorded in the ***Recall Log***.

Recalls will be initiated under circumstances such as:

- Intentional contamination of product
- Product found with high levels of pesticide residue and/or pesticide residue from an illegal or restricted chemical
- Known or suspected contamination by a chemical, physical or microbiological hazard
- Hazards including known infectious disease or blood contamination
- Notification from a supplier or business partner that any of the above occurred prior to receipt of the product at its final destination

Mock Recall

A mock recall is performed on actual delivered product annually to verify the effectiveness of the recall program. Record is kept in the ***Recall Log*** below.

Procedure:

1. A buyer is contacted and informed that a mock recall is being performed.
2. The buyer is asked to locate all containers of a particular purchased product.
3. The buyer is asked to supply an accounting of the number of cartons still in his possession and the number of containers sold. This can be done over the phone.
4. All communication with the buyer will be recorded and included in the ***Recall Log***.

Recall Log:

Step Backward					Step Forward		
Recall Date	Item Recalled	Tracking Code	Amount Shipped	Shipping Date	Customer contacted and date	Amount remaining at original customer	Status of the remainder

Water Quality Assessment

Policy:

Water used for drinking, hand washing, and on harvested crops is potable. Potable water is available to all workers. The quality of water used for chemical applications and irrigation is assessed and is known to be adequate for its intended use. All water sources are tested for generic *E.coli* and the results are quantified. Depending on the source and the use, the frequency of testing will vary.

Water Source	Tests per Year	Comments
Municipal	1	Test results are acquired from the local water authority or tested by the Food Safety Manager
Well	1	
Surface Water	3	At planting, peak use, and during harvest *Surface water is not considered potable, and should not be used for drinking, washing, or packing.*

All results are recorded in the ***Water Quality Assessment Log***.

Procedure:

1. Contact the lab that will be testing the water. Note any requirements the lab may have for testing water quality (i.e.: amount to sample, temperature of sample, age of sample, etc.).
2. Send sample to the lab.
3. Retrieve results from the lab. Determine if the results are within the accepted range. Record results in the ***Water Quality Assessment Log***.
4. If unacceptable, perform an observational review of the water source area to see if there are any obvious problems or situations that can be mitigated. Record observations.
5. Take recommended actions to mitigate contamination and retest as needed. Record any mitigation actions and subsequent water test results in the ***Water Quality Assessment Log.***

Sanitation & Hygiene Policies

Hand-Washing

All employees handling produce for processing or sale must use proper hand-washing techniques before beginning work and upon returning to work after taking breaks, going to the restroom, eating, smoking, sneezing, or other activities that could potentially contaminate the hands.

Visitors

Visitors will be instructed as needed to follow the same hand washing, smoking, eating, clothing and jewelry, and illness policies as farm workers.

Toilet/Restroom/Field Sanitation Units

Clean and well-maintained toilet and hand-washing facilities are provided for all visitors, workers, and customers. All toilet/restroom/field sanitation units are properly supplied with single-use towels, potable water, soap, signage about hand washing, and toilet paper.

Documentation

Monitoring, restocking, and cleaning are documented in the ***Toilet/Restroom/Field Sanitation Units Cleaning Log*** are performed per the following schedule:

_____

_____

_____

Clothing and Jewelry

Employees will wear clothing free of debris and fecal matter to work every day. Employees are not required to wear hair or beard nets. No large, loose jewelry that risks falling off or out is permitted in the field, around machinery, or in the packing area.

Break

Smoking and eating are confined to areas outside of the production and packing area. All workers are trained to store personal items in designated areas. The only personal containers that are allowed in the field, at any time, are those used for the sole purpose of carrying drinking water for consumption in the field**.** Under no circumstances will glass containers be allowed in the field or packing area.

Training

All workers receive training when they start work on the farm and review the farm's food safety policies once a year. Training includes instruction on all company policies related to worker health and hygiene, on-farm food safety practices, and (where appropriate) specialized training related to specific jobs. Record of worker training is kept in the ***Worker Training Log.***

Illness Policy

Workers must restrict their direct contact with produce or food-contact surfaces if showing signs of illness. The following symptoms prohibit an employee from working and handling fresh produce:

- Diarrhea
- Fever
- Vomiting
- Jaundice (when the whites of the eyes are yellowish and the skin has a yellowish tinge)
- Sore throat with fever
- Open wounds, lesions, or infections

Any worker found to be showing any of the above symptoms will be prohibited from handling produce and the incident will be recorded in the ***Injury/Illness Report Log.***

Blood & Bodily Fluid Policy

All employees must restrict their direct contact with produce or food-contact surfaces if they have an open sore or lesion that cannot be effectively covered. If blood or other bodily fluid should come in contact with produce in the field, immediate action must be taken to identify the extent of the contamination and eliminate it. Any produce contaminated by blood or bodily fluid will be disposed of.

Injury Policy

If someone is injured on the farm, either in the packinghouse or in the field, their injuries should be treated immediately. Any injury sustained on the farm will be recorded in the ***Injury/Illness Report Log.***

Preharvest/Postharvest Material

Policy:

Only licensed individuals may apply regulated substances including plant protective sprays. Individuals applying materials have a working knowledge of the use of these materials including what the material is used for, the appropriate strength level, and what to do if there is a spill. For non-regulated materials, Material Safety Data Sheets (MSDS) suffice as training materials and are kept on file. Our farm uses all pesticides and other materials in a manner consistent with prevailing regulations and the labeled instructions.

☐ Our farm does use regulated substances including plant protective sprays

☐ Our farm does not use regulated substances including plant protective sprays

Record:

Attached in this manual are all relevant license numbers and expiration dates.

Companies contracted to apply preharvest/postharvest materials are indicated below as necessary:

Company Name	Material Applied	When Applied	Contact Information

Individuals applying materials have been trained in proper handling of chemicals, amount of material/acre, and all other regulatory and safety practices for application.

Material Being Applied	Individuals Trained	Signature	Date

Animals / Wildlife / Livestock

Policy:

Domestic animals which can be controlled are excluded from entering crop production areas to reduce the potential for contamination. Adequate measures are taken and barriers exist that ensure animal waste from adjacent fields or storage facilities does not contaminate the production areas. Measures are taken to restrict livestock access to water sources used in crop production.

Crop production areas are monitored for the presence or signs of wild or domestic animals entering the areas.

Documentation

Observations and measures taken to reduce animal entry are logged in the ***Monitoring/Activity Log*** and are performed on the following schedule:

_____

_____

_____

Manure & Municipal Biosolids Policy

The following policy is used:

☐ **Raw Manure or Raw/Composted Manure Combination**

- At least 120 days must lapse between date of raw manure application and date of harvest.
- See these records for verification:
  - Manure/Compost Application Log
  - Harvest Log
  - Composting Log

☐ **Composted Manure/Treated Municipal Biosolids Only**

- Manure and Municipal Biosolids are only used as "composted" or "treated" and have been properly managed to reduce the expected level of pathogens.
- If acquired from another source as a finished product, records are kept that describe the method used to reduce the expected level of pathogens.
- See these records for verification:
  - Manure/Compost Application Log
  - Composting Log

☐ **No Manure or Municipal Biosolids Used**

Soils

Policy:

A previous land use risk assessment has been performed for all crop production areas and is recorded below. Only land with a history of minimal risk of microbial contamination is used in crop production. If previous land use is deemed a risk, the site is tested for contaminants and preventative measures are taken to mitigate the known risks.

Documentation: Previous Land Use Risk Assessment

Describe the previous land use:

_____

_____

_____

_____

_____

If the Previous Land Use Risk Assessment indicated a possibility of contamination, including flooding, describe measures taken to mitigate known risks:

_____

_____

_____

_____

_____

_____

_____

_____

_____

☐ **Test results were necessary. See results**

Preharvest Risk Assessment Policy

A preharvest assessment of the crop production areas is performed and documented before each harvest. Risks are noted and recorded in the ***Harvest Log***. Risks which are monitored in the preharvest risk assessment include things such as the following:

- Are toilet and wash facilities properly located/functioning?
- Is there evidence of unauthorized entry or physical contamination in the crop area?
- Is there evidence of domestic or wild animal crop damage?
- If areas are contaminated are they isolated for "no-harvest"?

Sanitation Spill Policy

In the event of a major spill or leak of a toilet/restroom/field sanitation unit, a response plan is in place. Records of servicing will be recorded in the ***Toilet/Restroom/Field Sanitation Unit Cleaning Log***.

Response Plan Standard Operating Procedure:

1. All harvest operations in and near the spill area will cease until the spill is contained.
2. The Food Safety Manager is made aware of the spill.
3. Efforts will be made to prevent any further spilling or contamination.
4. Any affected produce is immediately disposed of.
5. People and animals will be kept out until the area is sufficiently decontaminated. The area will be cleaned and sanitized.
6. Any further servicing of facilities will be recorded in the ***Toilet/Restroom/Field Sanitation Unit Cleaning Log.***

Harvesting Containers & Equipment

Policy:

All objects that come into contact with produce must be clean, in good working condition, and cleaned and sanitized between uses. This includes, for example, hand-harvesting equipment (knives, pruners, etc), harvesting containers, transportation equipment, and bulk hauling vehicles. Harvesting containers will not be used for carrying anything but produce. Containers are kept in good repair and damaged ones are either discarded or repaired. Cleaning history is kept on file in the ***Cleaning Log.*** Containers and equipment not in use will be stored in a clean and secure location. Employees are trained in use of containers.

Documentation

Produce in harvest containers will be covered when being transported from the field to packing area. The following practices are used on our farm:

_____

_____

_____

Cleaning and sanitizing processes are described below (including products used and worker instructions):

_____

_____

_____

Harvest Contamination Risks Policy

Policy:

If a contamination event occurs involving broken glass/plastic or a chemical spill or leak, one of the following procedures are observed:

Broken Glass or Plastic Standard Operating Procedure:

1. If broken glass or plastic is found, or glass is broken on machinery during harvest, harvesting activity is stopped as soon as possible.
2. The area is thoroughly inspected and all shards are picked up and disposed of.
3. Depending on the source and size of breakage, the area around the original breakage may be marked off-limits for harvest.

Chemical Spill or Leak Standard Operating Procedure:

1. Immediate action will be taken to stop the spill or leak.
2. The contaminated area is isolated and all contaminated produce is disposed of.
3. For egregious spills or leaks, a call will be made to the **Agriculture Pollution/Spills Hot Line: 1-800-405-0101**. This 24-hour hot line is used for reporting accidental agricultural pesticide, fertilizer and manure spills. The recommendations of the hot line and/or any relevant Material Safety Data Sheets will be followed for remediation steps.

Field Packing & Packing Area Materials

Policy:

Only new or sanitized containers are used for both field packing products and products packed in in the packing area. Final packing materials used in field pack and packing area operations are protected from sources of contamination.

Documentation

The following describes our farm's packing materials:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Packing Area

Policy:

Source water and/or ice used in washing is potable (see ***Water Assessment Log***). Any ice used for cooling produce is transported and stored under sanitary conditions.

Reasonable efforts are taken to remove or reduce excessive dirt and mud from produce and harvest containers before entering the packing facility. Wash water is not reused and is sufficiently treated to reduce microbial contamination. Special care is used for high risk crops. Treatment methods and/or monitoring of wash water temperatures are noted below.

Documentation

Wash water quality is maintained by the following practice(s):

_____

_____

_____

_____

_____

_____

_____

_____

_____

All food contact surfaces are in good condition, cleaned, and sanitized between each use. Cleaning activity is recorded in the ***Cleaning Log***. Only food grade-approved and labeled lubricants are used in the packing equipment/machinery (see labels of identified lubricants). Only new or sanitized containers are used for packing the product (see ***Cleaning Log*** for sanitized packing materials). Any produce dropped, spilled, or that comes in contact with the floor in the packing area is discarded.

For packing area worker health and hygiene, see Sanitation and Hygiene Practice Policies (page 7).

Rodent & Pest Control

Policy:

A pest control program is in place to reduce the risk of contamination in the packing and storage facilities by rodents or other animals, including pets. This program is outlined below and records of activity are kept in the ***Pest Control Log***. If and when a company is contracted to perform pest control activities, a report is provided by the company. Bait is never used in or near the packing facility. Where there are walls, floors, ceilings, and windows in packing and storage facilities, they are well maintained and are free of cracks and crevices.

Documentation

Our pest control program is outlined below. *(This may include trapping, netting, noise cannons, reducing rubbish piles and high grasses, etc. NOTE: Domestic animals are NOT part of our program)*

_____

_____

_____

_____

_____

_____

_____

_____

_____

3-30, 3-31, 3-32, 4-13, 4-14, 4-15

Storage

Policy:

Storage areas are kept clean and tidy. The general housekeeping policy for the storage area is the same as for the packing area, as is the worker hygiene, water/ice quality, and the pest and rodent control program (See pages **7, 13, 14, 15**).

Coolers and storage areas are inspected for holes, cracks, crevices, and foreign material before use for the season. The cooler and storage areas is monitored and cleaned (as needed) to prevent contamination of product. Any produce that is spilled or comes into contact with the floor is disposed of.

Documentation

Monitoring and cleaning activity is recorded in the ***Cleaning Log*** and is performed per the following schedule:

_____

_____

_____

Refrigeration

Policy:

Storage coolers are maintained in good working condition and are monitored when produce is present. Thermometers are checked for accuracy. Temperatures and thermometer verification are both recorded in the ***Cooler Temperature Log***. Refrigeration equipment (condensers, fans, etc.) are cleaned and cleaning activity is recorded in the ***Cleaning Log.*** Any iced produce is stored in a way that it does not drip on produce stored below.

Documentation

Coolers will be monitored according to the following schedule:

_____

_____

Procedure

Thermometers will be checked and calibrated as necessary using the following procedure:

_____

_____

_____

_____

_____

_____

Transportation

Policy:

All delivery vehicles used to transport produce are inspected for signs of unsanitary conditions before loading and cleaned as necessary. All records of inspections and cleaning will be kept in the ***Cleaning Log***. Vehicles used to carry animal products or other potentially hazardous items such as carcasses, manure, or pesticides will not be used. Efforts taken to ensure adequate transport temperatures for high-risk, temperature sensitive-crops (especially cut leafy greens) are included below. When vehicles are loaded, care is taken to ensure produce is not damaged during the loading process. Produce is placed in vehicles in a manner that prevents excessive jostling and shifting which could damage produce in transit.

Documentation

During delivery, crops are maintained at a temperature suitable for the crop and are listed below.

Crop	Temperature	Crop	Temperature

To ensure adequate temperatures are maintained during transport, the following procedure is followed:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____