# Good Agricultural Practices Food Safety Plan

For

Local Foods Farm

Name of Farm or Orchard

Frank Z. Farmer RR 1 Nightingale, PA 17500

Owner name and business mailing address

Frank Z. Farmer

5/25/2014

Signature person responsible for food safety

Date

The information in this document is a true representation of the food safety conditions and practices followed at this location.

This is a sample food safety plan for educational purposes only. You must prepare your own plan that is based on your specific operation.

We chose to present the policies and procedures that make up our farm food safety plan according to the sections specified within the United Fresh Produce Association's Harmonized Good Agriculture Standards and the USDA AMS GAP audit.

## **1.1. Management Responsibility**

**Our Food Safety Policy:** On our farm we are committed to producing safe products through good agricultural and good handling practices that focus on food safety and quality. We strive to prevent microbial contamination of fresh produce so that it is not necessary to take corrective action after a product has left our farm. We communicate this policy to our workers during training sessions continually reinforce it during the growing season.

**Our Disciplinary Policy:** If a worker does not follow acceptable sanitary practices, he/she is verbally corrected and retrained if needed. If we see repeated lapses in good sanitary and hygienic practices in any farm worker we will move them to a part of the operation that does not involve handling the produce or they will be dismissed.

Person responsible for the food safety program at this location:				
Name/ Position		Address		
Frank Z. Farmer/Owner		RR1 Nightingale, Pennsylvania, 17500		
Telephone: 555-555-1212	Fax: 555-555-1213		E-mail: Frankzfarm@farm.com	
Alternate Contact (optional)				
Name/ Position Address				
Bill Farmer/Co-Owner		RR3 Nightingale, Pennsylvania, 17500		
Telephone:	Fax:	E-mail: Frankzfarm@farm.com		

#### Agricultural activities conducted at this site:

#### Description of the agricultural activities conducted at this site:

We grow baby salad greens in 2 high tunnels and wash them in an indoor packing area. We sell our tomatoes and watermelon through an auction which is 2 miles from our farm and some directly to customers from our roadside stand or at a weekly farmers market which is 70 miles from our farm. We use a refrigerated trailer to hold our lettuce until it is sold through a distributor who hauls it in their refrigerated truck for resale to restaurants and small grocery stores. There are 30 pastured chickens in a movable pen and 28 dairy cows on our farm. Our family lives on the farm and does most of the work, although we hire local 2-3 part-time helpers during busy times to help start seedlings and sort and pack harvested products.

Crop(s) grown on this property: (list acres owned, leased/rented, contracted, and/or consigned	
for each crop):	
Crop(s)	Area under cultivation (acres)
Salad Greens	High tunnel 0.25 acres
Tomatoes	2 acres
Watermelon	1.75 acres
Hay and Pasture	8 acres
Total area under cultivation:12	
Additional crops documented on separate sheet if necessary. Yes $\Box$ No $\square$	

## **1.2. The Food Safety Plan**

This food safety plan identifies all products and materials used to grow them that apply to this plan. The plan describes physical, chemical, and biological hazards that could occur and procedures for controlling them, including monitoring, verification and recordkeeping, for the following areas: water, soil amendments, field sanitation, production environment, and worker practices.

Our plan includes policies and procedures for how we keep our products safe and checklists and forms that show we are following our plan. This food safety plan is reviewed and revised, if necessary, at least once every year before the season begins.

## **1.3. Documentation and Record Keeping**

We keep written records that show we are following the plan. Our records include the plan, checklists, and forms. We keep all of our records binder which is kept on a desk in our home. Previous records are filed in a cabinet so they are available for inspection. Our records begin in 2013, the first year we have started our food safety plan. We will keep these records for at least two years.

## 1.4. Worker Education and Training

We conduct training for harvesters and handlers every year before the season begins and each time a new worker is hired during the season. We keep a record on file of the names of everyone who has been trained and the date of training. Our Food Safety Manager has participated in the 5-hour GAP training "Keeping Fresh Produce Safe Using Good Agricultural Practices" by Penn State Extension. We train our harvesters and handlers using Penn State Extension's "Food Safety Field Training Kit for Produce Handlers."

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All of our harvesters and food handlers are trained so they understand:

- Our Farm Food Safety Policies and procedures
- When and how to correctly wash hands.
- That they must wear reasonably clean clothes.
- That they should not handle produce if they are ill.
- Not to use harvest containers for carrying or storing non-produce items.
- That they must tell their supervisor if they have a bloody cut or other serious injury or if blood or other body fluids get onto produce, containers or food surfaces.
- That they must report any type of product contamination such as from chemicals, petroleum, pesticides, glass, or a spill or leak from a toilet facilities.

Farm visitors and subcontractors are held to the same food safety standards as employees.

Applicable documentation: (Check all that apply)

□ Employee Food Safety Training Log

□ Penn State Keeping Fresh Produce Safe Using Good Agricultural Practices certificate



## 1.5. Laboratory Sampling and Testing

We test the following for microorganisms (check all that apply)			
☑ Irrigation w	vater 🗹 Wa	ash water	☑ Drinking water
□ Product	🗹 Compost	$\Box$ Soil	□ Food contact surfaces

We started keeping records in 2009. All of our microbial testing is done by Water Labs, Inc., which uses Good Laboratory Practices (GLP). (See Section 2.4 for water risk assessment). Water samples are taken by the food safety manager according to the GLP lab instructions and established procedures. We have our well water used for drinking and washing tested twice each growing season. Pond water used for irrigation is tested three times each growing season. For drinking water and hand washing water, the results must show absence of detectable levels of *E. coli*. If the test is positive, we treat our wells with chlorine (sodium hypochlorite) according to procedures described by Penn State Extension (included with this plan). We require that surface water test results be reported in colonies or MPN of *E. coli* per 100 ml (CFU/100ml) and compare them to EPA recreational water standards of no more than a mean value (last 5 samples) of 126 E. coli/100 ml.

For each shipment of mushroom compost, we receive a Certificate of Analysis from a GPL laboratory that indicates absence of *E. coli* (See Section 1.7). If the mushroom compost is delivered without a Certificate of Analysis or the results indicate the presence of human pathogens, the shipment is rejected for return to the seller.

We keep all microbial testing results with our food safety plan and other records. We keep test results in a filing cabinet for two years.

Applicable documentation: (Check all that apply)

 $\Box$  Laboratory testing procedures with evidence of Good Laboratory Practices (GLP)

 $\Box$  Water test results log

□ Compost certificates of analysis 1.7



## 1.6. Traceability

Our traceability and recall programs are closely related.

#### **Trace back records**

We keep records of all of our agricultural inputs including soil amendments, fertilizers, seeds/transplants, and agricultural chemicals so that we can link them with each of our crop types and ultimately to the buyer(s).

Each box is labeled to show the following information:

- " The type of crop
- " The name and address of our farm
- <sup>..</sup> The field the crop was grown in
- " The harvest date

We use a lot number system that identifies the harvest date and field (Example 072414-2 means harvested on July 24, 2014 from field 2.

When we make a sale, the invoice includes information on boxes shipped, to whom, the date of shipment, and the harvest date and field code number. We keep copies of all invoices so that we and the buyer have the same information.

If a product is comingled during or after harvest, the above label information for each crop type and block of land is provided to the buyer.

#### Trace forward and mock recall exercise

Once during each growing season, we conduct a trace forward/mock recall exercise. We do not contact our buyers. We only verify that we can match each lot sold to the specific buyer. We keep a record of contact information for each of our buyers (Form 6.1-1). After a selected lot is sold and shipped, we go through our records to verify that we can match each box shipped to each buyer it was shipped to. Our goal is to achieve 100% reconciliation of product to recipients within 4 hours. The goal of the exercise is to demonstrate that we have open communication pathways with our buyers and that, should it be necessary, we can work with the auction or buyer to remove any of our shipped products from their inventory.

## 1.7. Recall program

Because we are a small operation, only our farm food safety manager is responsible for carrying out a recall if a contamination problem happened on our farm and there was a need to alert our customers. If we discovered a need to recall one of our products, he will contact all of our buyers that purchased any affected products, identify the lots at risk, and ask them to remove them from the market. We test our recall program once each year through a trace-back and trace-forward exercise described in section 1.6.

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## **1.8.** Corrective Actions

If a food safety risk is discovered, our farm has we take corrective actions to solve the problem. We document what was the problem, what actions we take to correct it, who was responsible for correcting the problem, and what if any improvements in our practices were needed to prevent future problems.

## 1.9. Self-audits

Our farm performs an annual internal self-audit before the beginning of each season. All aspects of the operations food safety plan are reviewed and we record any corrective actions that may have been needed. We use the Annual Self-audit form from Penn State Extension.

Applicable documentation: (Check all that apply)

 $\Box$  Receipts from the purchase of inputs

□ List of buyers and up to date contact information

 $\Box$  Sales records

 $\hfill\square$  Transporter contact information

 $\Box$  Recall exercise document

□ Annual Self-audit 1.9.1

 $\Box$  Corrective action reports



## 2. Field Production

## 2.1. Field History and Assessment

To the best of our knowledge, potential hazards due to previous land use are low. This is because we have been growing produce or cover crops at this location for at least 5 years. The land now under cultivation for food crop production has never been used for confined animal operations. However, the land now in crop production was used for pastured dairy cattle over 5 years ago. We believe this is a long enough time to any harmful microbes left by the cattle to die off.

Our attached farm map shows production fields, high tunnels, barns, buildings and uses, portable bathrooms and septic systems, manure storage areas, compost, livestock/dairy facilities on this property, active wells, surface water sources, possible flooding areas. We believe that sources of contamination are far enough away from and slightly uphill from our fields so that they will not affect our crop. There is one area that has flooded only once since we have farmed this land. If flooding should occur again, we do not harvest from that field. We use FDA recommendations for determining when and how previously flooded fields can be used again for fresh produce crop production.

We believe that the risk from neighboring farms is small. Our neighbors to the north have a 70 cow dairy farm that is upstream from our operation. Because we use that stream for irrigation, we test it 3 times a year for E. coli. (See section 1.5) Our neighbors to the south raise produce.

Neighbors with pastured 40 dairy goat herd adjacent to our crops have fenced fields to prevent their animals from roaming on to our property. The animals are downhill from our fields and we have not observed any water runoff into our fields during storms. A 2 house chicken facility is also downhill from our property and is not close enough to contaminate our crops. We believe that the potential for wind and water runoff to contaminate our crop is not a significant problem because of the layout of our farm.

As shown on our farm map, we have two high tunnels that we use for starting tomato seedlings in the spring. They are grown in sterilized soil for later transplanting in the field. Because the seedlings are in the tunnels at least 65 days before the tomatoes are harvested in the field, we do not believe that there are any significant risks of microbial contamination of tomatoes. We do, however, keep the tunnels reasonably free from trash and debris. Also shown on our farm map, is our equipment and vehicle storage building on our farm. We do some sorting and packing on the ground floor of our equipment barn. The roof, ceilings and walls are sturdy and do not leak during rain storms and are not a source of contamination. We regularly cut grass and weeds around the building and we keep doors closed when the building is not in use. We have purchased spikes to place on rafters to prevent bird nesting. If we spot any perching or nesting activity, we remove them immediately.



□ Farm Map

## **2.2. Worker Health/Hygiene and Toilet/Handwashing Facilities**

We have at least one portable toilet and hand washing facility for every 20 employees as required under OSHA farm standards. It is within a <sup>1</sup>/<sub>4</sub> mile of most parts of our farm. If workers are farther away from the facility than <sup>1</sup>/<sub>4</sub> miles, we use our pickup truck to transport them to the portable toilet or to our home if needed. We make sure our workers use the hand washing stations after using the toilets and any time their hands might have become contaminated and specified below.

Our worker training program includes instructions on how to wash hands before beginning or returning to work, after using the toilet, after eating and smoking, and after handling chemicals or other contaminated materials. We watch our workers continually to make sure they are using proper sanitary practices. As we described in our disciplinary policy (See section 1.1), any worker that does not follow acceptable sanitary practices is verbally corrected and retrained if needed. If we see repeated lapses in good sanitary and hygienic practices in any farm worker we will move them to a part of the operation that does not involve handling the produce or they will be dismissed. Health and hygiene policies also apply to anyone else who enters crop production areas including employees, contractors, visitors, buyers, product inspectors, and auditors.

We rent portable toilets from a service that specializes in this. Toilet facilities are ventilated and screened, have self-closing doors that can be closed and latched from the inside. We require that the maintenance service place the facilities at least 20 feet from the fields. We encourage workers to use these facilities whenever they need to. If for any reason, the unit is not working correctly, we tell our workers to use the home bathroom. If it is more than ¼ mile away, we provide a truck or tractor pulled wagon to take them there. The toilet has a hand washing station. It consists of a sink, a source of running potable water, soap, and single-use towels, and a trash container. We have a maximum of five workers in the fields and one portable toilet facility. Therefore, we meet and exceed OSHA guidelines for one toilet facility for each 20 workers.

Our portable toilets are serviced and cleaned every two weeks by a commercial service so they are in good working order, supplied, and that they cleaned and emptied on a regular basis. We use potable water for hand washing. Grey water is captured and emptied for disposal so that it drains away from crop areas. If a major spill or leak of field sanitation units or toilet facilities occurs, we block off the area until it is cleaned up. The facility cannot be used by workers until a supervisor has approved that it is ready to be re-opened.

During the growing season, we check to see that the facilities are properly stocked with toilet paper and paper towels and that the waste container has been emptied. We regularly inspect them to make sure they are clean. The portable toilet supplier cleans the unit each time they service it. If cleaning is needed more frequently, we spray and wipe the sink, water handles, door handles,

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toilet seat, and the floor with a commercial bathroom spray cleaner and sanitizing product. Trash is emptied from the container at least once each week or when it is close to being full.

We train our workers each season how and when to wash their hands. To the extent possible, we continually observe our workers behavior after they use the toilet and hand washing facilities. As we described in our disciplinary policy, if we see someone not following the rules, we tell them to go back and wash their hands. If this happens more than once, we retrain them using the training materials we previously described. If this becomes a regular problem with a worker, we do not let him or her work in the fields or in packing and washing areas.

During the growing season, we post a sign inside each portable toilet and in the indoor bathroom that instructs workers to wash their hands after using the toilet. Because some of our harvesters speak Spanish, we post the sign in this language too.

We require workers to start their work day in clean clothing. If we observe that their clothes are visibly soiled, we require them to change into cleaner clothes before starting work. We allow short sleeves, short pants, bare feet, and open toed shoes to be worn because we believe they do not significantly contribute to the possibility of product contamination. We believe that our hand washing training and enforcement is adequate enough to prevent hand to food contamination. Workers are only required to where a glove over a bandage on the hand or if they are wearing a wedding ring with a stone. Workers are permitted but not required to wear hats, caps, or aprons. On occasion, plain sect workers are hired. If they use straight pins to fasten their clothing, we require them to wear aprons to prevent them from falling off and getting into the product.

We require that workers hang up outer clothing, rain coats, and hats on racks in the workroom. We also require them to store clean tools on a shelf in the workroom at the end of their shift. Employees are instructed not to wear jewelry, watches, or other items when working with produce. Wedding bands can be worn if they fit snugly. If a wedding ring with a stone is too tight to remove, it must be covered with a piece of tape and then a glove must be worn over it. Removable piercings must be taken out before harvesting or handling produce. If some of our workers are using straight pins to fasten their clothes, we require that they be covered with an apron to prevent them from falling off and getting into the product.

We do not require harvesters and handlers to wear hats or caps in the field although they may do so if they wish. During post harvest sorting, washing, or handling, we do require food handlers to restrain their hair by tying it back or restraining it with a hat or cap. We allow small personal items such as radios or other music players if there are no small parts that can fall off and get into the product. Other personal items must be stored away from field or packing areas.

Smoking, chewing gum, eating, and drinking are only allowed in areas we have designated for breaks. Spitting, urinating, or defecating is only allowed in the toilet facilities provided. This information is contained in our training program and our disciplinary policy is used to enforce this.

We have shown where break areas are located on our farm map. We chose these spots so they would be at least 25 feet from growing fields which we believe is far enough away to prevent contamination. We keep the area clean by providing covered waste containers. Eating is not allowed on production equipment or containers. We allow unbreakable capped or re-sealable

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plastic water bottles in the fields. We also provide potable water and disposable cups in the break areas. We do not allow sharing of cups or drinking out of a shared ladle.

Workers with diarrhea, who are vomiting, have a sore throat with a fever, or show sudden yellowing of the eyes or skin are not allowed to harvest or handle fresh produce. We train them to report this to their supervisor so they can be sent home or assigned to non-produce handling areas. We train our harvesters and handlers to consider any cut or sore to be infected and therefore a source of germs than can make someone else sick. They are trained to report these signs to their supervisor or food safety manager and to cover minor cuts and scrapes with a bandage and a glove is necessary to keep it from coming off.

We train our harvesters and handlers to report any product contamination to their supervisor or food safety manager. An inspection is made within 2 feet of the original incident for other signs of contamination. Any product that is known to be contaminated is thrown into a plastic trash bag that is marked for special disposal. The bags are either burned in on-site or taken to the municipal dump.

If a container used to hold fresh produce or a harvesting tool becomes contaminated, they must be removed from the field and washed with detergent solution, rinsed, and sprayed with 1% bleach solution. If tables or conveyers have become contaminated with bodily fluids, workers are trained to notify their supervisor and it is cleaned and then sanitized with 1% bleach before it is used again. Workers are instructed to sneeze or cough away from the product or into the inside of their shirt to prevent product contamination. They are also trained to understand that if they do use their hands to cover a cough or sneeze, they should properly wash their hands before continuing work.

Each year before the season starts, we make sure that we have first aid kits supplied with bandages on hand. They are restocked as needed. First aid kits are readily available in the staff room and in the field wagons and tractors. We place them in an area where they stay dry, sanitary, and in usable condition. We put instructions on the kit to order new bandages when five or fewer are left in the kit.

Applicable documentation: (Check all that apply):		
	Restroom cleaning and restocking log 2.2.5.	
	Map indicating location of field sanitation units and Handwashing stations (Section 2.1)	
	Field sanitation service and cleaning contract / service report	
	Employee Food Safety Training log (Section 1.4)	

## 2.3. Agricultural Chemicals / Plant Protection Products

All of our agricultural chemicals comply with label directions and state and federal regulations. We store pesticides, herbicides and fertilizers in closed and properly labeled containers to prevent contamination of adjacent crops and/or water-ways. We document application dates, site, restricted entry hours, product, formulation, active ingredients, rates, size of area treated, quantity, type of pest, weather conditions, method of application, and name of applicator in our pesticide record book. We do not export any of our crops to other countries.

Agricultural chemicals are applied by trained, licensed, certified application personnel. Water used with agricultural chemicals is consistent with our water system risk assessment and water management plan. (See section 2.4) Agricultural chemicals are disposed of through the Pennsylvania ChemSweep Program or through a hazardous waste facility so they do not become a source of product or field contamination.

#### Applicable documentation: (Check all that apply)

 $\Box$  Pesticide Record Book

Pennsylvania Pesticide Applicator License number \_\_\_\_\_
Expiration date \_\_\_\_\_



## 2.4 Agricultural Water Risk Assessment

Our water system risk assessment is documented in our description of our water system and our water management plan as described below. We consider historical water testing results, the characteristics of the crop, the stage of the crop, and the method of application. We review it annually or whenever changes are made to the system.

Our water system description includes the chart below and information on our farm map. Water source and use is compliant with state and federal regulations. Water used for hand washing in field sanitation units is not required to meet EPA potability standards if chlorine or other acceptable agents are added to reduce the possibility of microbial contamination. Water systems used for clean water are never mixed with waste water and are designed to prevent cross-contamination.

Use\Source	Municipal	Private Well	Surface water
Drinking		V	Not permitted
Hand Washing		V	
Cleaning food contact surfaces			
Washing produce			
Irrigation: □ None □ Overhead         sprinkler ☑ Drip □ Furrow □ Flood			
Fertilizer application		V	
Pesticide / Fungicide application			

#### Water Sources and Uses

#### Water Management Plan

We understand that water is an efficient transport system for microbial contamination of food crops. The goal of our water management plan is to minimize risks associated with the water we use on our farm. We therefore take into account the source of the water, and how it is used on our farm, and current microbial standards for water when evaluating our water risks.

We minimize risks from well water by inspecting our wells each year to make sure they are in good working order, that the casing lining is not leaking, and they are not exposed to flood waters or run-off. On our farm we use drip irrigation from our creek which is applied directly to the soil. Drip irrigation minimizes food borne illnesses by keeping water away from the vegetable foliage and fruit and only applying it to the roots.

We use well water for drinking, hand washing, washing harvested produce, and washing containers used to hold harvested produce. We use creek water for most of our irrigation needs.

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If the creek dries up, we use well water. The locations of each water source are shown on our farm map.

For well water used for drinking, hand washing, washing harvested produce, and cleaning and sanitizing food contact containers. We require that this water be potable, meaning that there are no detectable levels of coliform and *E. coli* bacteria according to state and federal regulations. The same standard is used for any fungicide and pesticide sprays that contact the edible part of the crop. We sample water from each of the wells twice during the growing season and have it tested according to the procedures described by Penn State Extension in their fact sheet "How to Collect a Water Sample (a copy is attached to this plan).

For irrigation water, we use Environmental Protection Agency (EPA) recreational water standards of an average value of 126 E. coli bacteria per 100 ml taken over three samples taken during the growing season as a basis for determining if it is safe to use.

Three times during each growing season we test our creek water used for irrigation. We take a sample of the water as it comes out of our drip system and immediately take it to the laboratory for testing. If we must mail a water sample, we send it by overnight mail in an insulated box that includes a frozen ice pack.

If a well water sample is found to contain *E. coli* or coliforms, we immediately shock chlorinate contaminated wells using procedures described in the Penn State Extension fact sheet "Shock Chlorination of Wells and Springs" which is attached to this plan. For our creek water, if the average *E. coli* count for the last three tests is greater than 126 E. coli per 100 ml, we try to determine what might be the source of the problem. We look for signs that domestic animals have unrestricted access to the creek or that the wild animal populations in the area are excessive. We also consider the potential for run-off from upstream farms, cattle operations, or septic systems. We describe how we monitor for these in other parts of this plan.

If, despite our best efforts at controlling contamination sources, creek water levels remain unacceptably high we will use only well water, or consider installing in-line disinfection units.

Applicable documentation: (Check all that apply)		
Water testing documentation: (Check all that apply):		
□ Municipal water (not used on this farm)	□ Annual water bill	
	□ Laboratory analysis	
☑ Private well water	☑ Laboratory analysis reports	
	$\square$ Testing and corrective action log	
	☑ Well inspection log	
☑ Surface water	✓ Laboratory analysis reports	
	$\blacksquare$ Testing and corrective action log	
🗹 Farm Map	See Section 2.	
☑ Annual Self-Audit 1.9.1	See Section 1.9. for self-audit of water system	

## 2.5. Animal Control Risk Assessment

Our animal risk assessment is documented in our description of animal activities conducted at this site (Section 1.1), Field History and Assessment (Section 2.1) and Water Control Risk Assessment (Section 2.4), and how we control risks as described below.

We do all that we can to keep domestic and wild animals out of fields. All farm animals are fenced to prevent them from entering the growing areas and waterways. The presence of wild animals in the area is inevitable and we cannot completely control them. However, every day when we work in the fields, we routinely monitor the growing area for animal activity including the presence of animal droppings and record results in our Animal and Wildlife Monitoring Log. We also include an inspection for the presence of animals or animal droppings in our pre-harvest risk assessment. If we note that larger than usual numbers of wildlife are close to fields (for example mass nesting or foraging of flocks of geese or herds of deer) we use timed air cannons to scare them off. We also keep deer levels as low as legally possible by participating in hunting activities each fall.

Just before and during harvest we check for damage or contamination by domestic or wild animals. If we observe animal droppings in our produce growing fields, we mark off an area within a three foot radius of the contamination site. We do not allow any the crop in this location to be sold to customers. Instead, it is removed and disposed of by burning or composting.

Applicable documentation: (Check all that apply)

□ Annual Self-Audit 1.9.1

 $\Box$  Animal and Wildlife Monitoring Log 2.5.3.

□ Pre-Harvest Risk Assessment

🗆 Farm Map

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## 2.6 Soil Amendments Risk Assessment

Our soil amendments risk assessment is documented by our description of the composition of the any animal-based manure or compost used on our farm, records of manure application (Form 2.6.1), Certificate of Analysis from our compost supplier, and the Field History and Assessment in Section 2.1 of this plan where we describe how and where we store manure and compost.

We use mushroom compost as a soil amendment on our farms. Because we require that the supplier provide a Certificate of Analysis that shows less than detectable levels of *E. coli*, we use it for side dressing during the growing season.

In some years, we apply raw manure to our fields. Whenever raw animal manure is used, it is applied to soil at least 120 days before harvest. We document applications in the Manure Application Record Log (2.6.1) which includes information on spreading dates, field locations, the number of acres, type of manure applied, which crops are going in those locations, and the rate of application. Because we do not apply raw manure to adjacent fields during the growing season, there is no risk of particles drifting onto our produce crop.

We collect produce culls, used seedling soil, and other biodegradable farm waste such as weeds, kitchen and yard waste for composting. Because we do not monitor temperatures or have it tested for microbes, we apply this to the soil at least 120 days before harvesting.

<ul> <li>Manure Application Records 2.6.1.</li> <li>Purchased compost records including Certificate of Analysis 1.7</li> <li>Farm Man</li> </ul>	Арр	licable documentation: (Check all that apply)
<ul> <li>Purchased compost records including Certificate of Analysis 1.7</li> <li>Farm Man</li> </ul>		Manure Application Records 2.6.1.
Earm Man		Purchased compost records including Certificate of Analysis 1.7
		Farm Map

This is a sample food safety plan for educational purposes only. You must prepare your own plan that is based on your specific operation.

## 2.7. Vehicles, Equipment, Tools and Utensils

We keep a list of agricultural inputs which includes equipment, vehicles, tools, and utensils that may affect the safety of our products during normal use. Equipment, vehicles, tools and utensils used in the farming operations which come into contact with product are in good repair. We have a cleaning and sanitizing schedule for all food contact surfaces to reduce and control the potential for contamination. Our equipment is properly operated and maintained. Equipment traffic flow is prevented from traveling through an untreated manure area into the harvesting field.

Farm personnel are instructed to dispose of any product that has become contaminated by toxic chemicals such as fuel, pesticides, or other harmful substances during harvesting operations and to report the incident to the food safety manager. The food safety manager will determine the cause of the incident and to correct procedures and conditions if necessary. Exposed glass on equipment and machinery is protected against breakage. Farm personnel are instructed to dispose of any product if any should become contaminated by glass, metal fragments, and hard plastics or other harmful foreign objects not normally found in fresh produce and to report any incidents to the food safety manager. The food safety manager will determine the cause of the incident and to correct procedures and conditions if necessary.

Equipment cleaning and sanitizing operations are conducted away from the product and other equipment to reduce the potential for contamination. Water used for cleaning and sanitizing is potable. Water tanks are cleaned out before the season starts as part of general maintenance. They are also cleaned out after use if a substance other than water such as a chemical spray has been in the tank.

#### Applicable documentation: (Check all that apply)

- □ Agricultural inputs list
- $\Box$  Equipment list including vehicle, tools and utensils.
- $\Box$  Equipment, vehicle, tools and utensils cleaning logs.

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## 3. Harvest

## 3.1. Pre-harvest Risk Assessment

Our pre-harvest risk assessment (See Pre-harvest Risk Assessment form 3.1) is performed by conducting a self inspection prior to the start of harvesting in each field. This risk assessment requires that the harvesters verify using a check list that there was a pre-harvest inspection of the field and perimeter, the equipment and tools, container and packing materials, and that any conditions observed that might be a risk to contamination are documented. Any corrective actions taken are recorded. These inspections must comply with the policies and practices set forth in this document.

## 3.2 Water and Ice

Water change schedule are established for all uses of water. Test strips demonstrate that acceptance criteria have been met. We do not use ice on any of our produce. Water or ice that comes in direct contacts the harvested crop or is used on food-contact surfaces for washing or cooling purposes will meet microbial standards for drinking water. Water is treated to achieve the microbial standards to prevent cross-contamination. Ice and water will be sourced / manufactured, transported and stored under sanitary conditions. Our harvest and washing procedures does not use re-circulated water for washing.

Our potable water-delivery system is maintained so does not become a source of contamination of produce, water supplies or equipment with pathogens. As previously described, we inspect our wells are and shock chlorinate them if tests show microbial contamination. We do not apply any commodity specific standards beyond the general standards we apply as described in this plan.

## 3.3 Containers, Bins and Packaging Materials Policy

All harvesting containers are stored off the ground, and covered during storage to protect them from contamination. Before harvesting starts, containers that come in direct contact with product are inspected for cleanliness and that they are intact and therefore are not likely to contaminate the products. We purchase only new plastic containers for harvesting. We do not re-use cardboard boxes when we pack products for shipment. We training our workers that harvesting containers and boxes are never to be used for carrying or storing any non-produce items.

## 3.4 Field Packing and Handling

Only sound produce appropriate for the intended use is harvested. Produce that has been damaged or decayed is not harvested or is culled for composting. Product that is dropped or comes in contact with the ground is not harvested unless the product normally grows in contact with soil.

We cover exposed glass on equipment and machinery with unbreakable plastic to protect against breakage. Workers are instructed to throw away any product that has become contaminated by glass, metal fragments, and hard plastics or other harmful foreign objects not normally found in fresh produce and to report any incidents to their supervisor. Supervisors are to determine the cause of the incident and to correct procedures and conditions if necessary.

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Our produce travels through a dry brush machine which is cleaned before the start of each season and as needed throughout the season. We also spray it with a 1% chlorine solution at the end of each shift it is used. We do not use cloths, towels or other cleaning materials to wipe produce unless there is a procedure to prevent cross contamination.

Packaging materials are appropriate and suitable for holding produce. Packaging materials are stored on pallets to keep them dry, clean and free from dirt or residue. They are stored separately from hazardous chemicals, toxic substances and other sources of contamination. We inspect the packaging and the packing area for signs of pests and take steps to eliminate them when they are found. Produce packed in the field can come in direct contact with the soil with careful attention to avoid and reduce soiling the containers and when feasible harvest carts and wagons are used to reduce contact with soil.

## 3.5 Postharvest Handling and Storage

Harvested produce is protected from rough handling to avoid walking on, stepping on or lying on harvested produce, food contact surfaces and packaging materials to reduce the risk of contamination.

We have a cooler next to the packing and equipment building. It is well sealed and graded to drain out. Boxes of packed products are placed on pallets or on shelves so they do not directly contact the floor. The condensate line from the cooling unit drains out of the cooler. The cooler is cleaned and sanitized with 1% chlorine before harvesting and storage begins. We regularly sweep out the cooler of any debris. Our cooler is well insulated and has a drain leading outside to prevent pooling of water on the floor.

Pallets, produce bins, totes and any materials that come in contact with the produce or the containers during handling or storage are cleaned before the harvest season begins with a detergent and then sanitized with 1% chlorine solution so they are not a source of contamination. If they become excessively dirty during harvesting, they are rinsed with potable water and allowed to drain dry before they are used again.

Workers are instructed to throw away any product that has become contaminated by toxic chemicals such as fuel, pesticides, or other harmful substances during harvesting operations and to report the incident to their supervisor. Supervisors are to determine the cause of the incident and to correct procedures and conditions if necessary.

Chemicals, including cleaning and maintenance compounds are stored when not in use in a storage cabinet that is separate from harvested produce and equipment and tools that contact produce.

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Applicable documentation: (Check all that apply):		
	Pre-Harvest Checklist 3.1.1	
	Water Treatment Log 3.2.3.	
	Employee Food Safety Training log (Section 1.4)	

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# **4. Transportation (Field to Storage or Packinghouse)**

## 4.1 Equipment Sanitation and Maintenance

Trucks are inspected for cleanliness and that the cooling unit is turned on before boxes of produce are loaded. Refrigerated units are continuously monitored to make sure that they are in good working order and the temperature is appropriate for the product being loaded. Trucks must only be used to carry produce. If there is evidence that it was used for transporting animal products, it is cleaned, rinsed with water, and then sanitized with 1% chlorine solution. Personnel responsible for the loading and unloading of produce are told not to damage produce or packaging materials to keep contamination risks low. Trash or waste products coming out of the field or packing areas are removed at the end of the day and disposed of so they do not come into contact with produce.

Applicable documentation: (Check all that apply)

 $\Box$  Truck Checklist 4.1.1.

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