



Fundamentals of Creating a Colorado Farm Food Safety Plan

How to document your farm's policies and procedures for reducing the risk of contamination

April 23, 2012

Template, Slides & Resources

- This set of slides was designed to be used as a guideline for completing the Colorado Farm Plan template, which may be printed or filled out on a computer.
- **Note:** this is just a guideline. One plan can not fit all operations but this template can be customized to your farm. **Examples appear in red font on the slides.** Additional information can be found in the notes attached to the slides including audit questions (in italics) that relate to that section. Please only include practices you can implement.
- The Colorado Farm Plan Template, webinar slides, blank documentation forms, slide notes and a list of other resources are available from the CSU Extension Farm to Table Food Safety website: <http://farmtotable.colostate.edu/>

Farm Plan Overview


- Farm Plan
 - People
 - Farm
 - Facilities
 - Pre-harvest activities
 - Post-harvest activities

Getting Started – Checklist of Documents

- Contact information for all personnel
- Farm map, packing area diagram & flowchart
- All training certificates – pesticide application, etc.
- Water testing results
- All record keeping sheets – training logs and materials

Cover Page

- Personalize with
 - your farm's name
 - location
 - logo, photo



This plan is unique to your farm and outlines the policies and procedures that are in place to keep the food you produce as safe as possible.

Cover Page

Good Agricultural Practices
Food Safety Plan
for

Name of Farm/Orchard

The information in this plan is a true representation of the food safety practices and conditions followed in this operation.

Owner or manager Signature Date

Farm mailing address City State Zip Code

GPS coordinates (optional) Longitude Latitude

PAGE 1

Personnel

Name	Contact information		In charge of:
	Phone	Email	
			Food Safety

Workers/Volunteers

Training/Farm Policies	Received training (Yes/No)	Trained by:	Frequency or Date?
Proper hygiene & hand washing			
Illness & injury policies			
Lunch and break locations			
Allowed drink containers			
Proper clothing/allowed jewelry			
Safe handling of produce/spills			
Cleaning tools and equipment			
Agricultural chemical handling			
Farm security			

PAGE 2

Worker Facilities: sinks (soap, water, disposable towels), signs, toilets, drinking water

Facility Locations:

Policy and procedures related to hand washing:

All workers must wash hands before beginning work and returning to work after eating lunch and taking breaks, going to the restroom, smoking or otherwise compromising good hand hygiene. Signs in English (and other languages as needed) are posted in lavatories to instruct workers to wash hands before returning to work.

Facilities are checked before each work day to resupply soap and paper towels; sinks and lavatories are cleaned regularly and as needed.

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Worker Health, Hygiene, and Sanitary Practices Policy (fill in below or attach policy):

Applicable documentation (Check all that apply):

- Verification checklist (for compliance with hand washing and other appropriate hygiene practices)
- Training log (for proper procedure and frequency of hand washing)

Toilet Facilities (check all that apply):

Indoor facilities Portable units None on site

Maximum number of employees on site at any one time	Number of toilet facilities within 1/2 mile walk	Ratio of employees to toilet facilities

Applicable documentation (Check all that apply):

- Additional information sheet
- Verification checklist (for condition, maintenance, use by workers)
- Map indicating location of field sanitation units and handwashing stations
- Field sanitation service and cleaning contract/service report
- Spill response plan
- Training log (for notification of reasonable access and proper use)

Policy for Visitors and Applicable documentation (Check all that apply):

- Visitors must sign in and receive a verbal or print copy of pertinent farm policies
- Visitor/CSA member policy

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First aid procedures

If someone is injured at the farm, first aid kits are available for use at (where) _____. The supplies are checked and updated (when) _____. All workers are instructed during training to attend to injuries immediately. This includes any cuts, abrasions, or other injury incurred while working. Employees should notify their supervisor and fill out an accident report. Employees are instructed to immediately contact supervisor in the event of allergic reactions. If the injury/reaction is critical or life threatening, employees are instructed to call 911 for proper care.

Illness: Any employee who is sick should notify their supervisor immediately and not handle fresh produce. If an employee does not self-report and is found to be sick by the supervisor, the employee will be immediately dismissed from work and not allowed to return until they are symptom free.

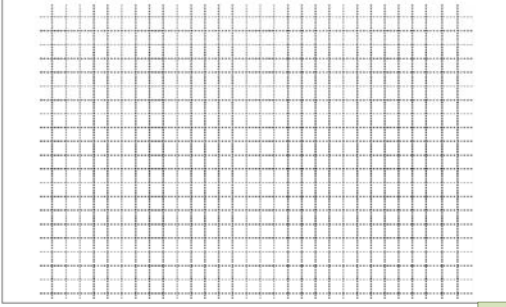
- 1) These symptoms preclude an employee from working and handling fresh produce.
 - Diarrhea, Fever, Vomiting, Jaundice, Sore throat with fever, Lesions containing pus (including boils or infected wounds, however small) on the hand, wrist, or any exposed body part
- 2) If an employee is recognized as having any of the conditions listed above, these conditions will be recorded on an Illness/Injury Report Form.

Blood and body fluid: If blood or other bodily fluid should come in contact with the field or the produce, it will be addressed immediately. If a person is not able to immediately deal with the contamination due to injury, that person will mark the area if able and immediately notify his/her supervisor who will take appropriate action. If an employee is injured in the field or packinghouse, their supervisor after assuring their safety, will immediately inspect the area where the injury occurred to be certain no blood or bodily fluids have contaminated the area. If there is blood in the field, all contaminated surfaces will be removed to a plastic bag with a shovel or gloved hands and placed in a trash can. All affected soil will be shoveled up around and under the area and will be removed. All affected produce will be discarded as well as all packing materials. All actions will be documented (where) _____.

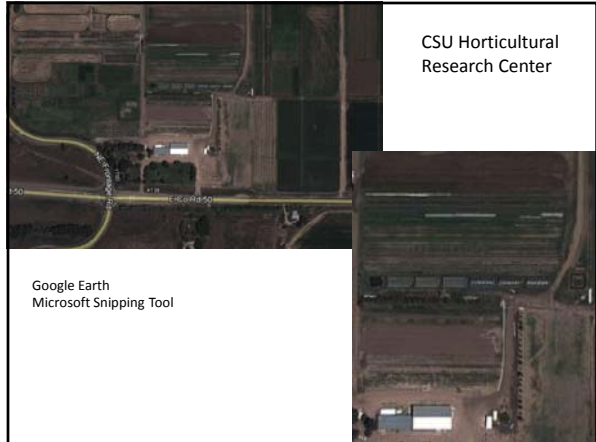
Farm/Orchard Environment

Field Map

Sketch or attach map that includes production, field packing, staging areas, field sanitation units, active wells, surface water sources, regular or recent flooding areas, manure storage sites, and septic systems on site and adjacent properties



PAGE 5



Previous Land Use (check all that apply for area under cultivation)

Has the current crop(s) been grown at this location for LESS THAN 5 years? Yes <input type="checkbox"/> No <input type="checkbox"/>	Has there been any expansion into previously unused land within the last 5 years? Yes <input type="checkbox"/> No <input type="checkbox"/>	Has the current crop(s) been grown at this location for MORE THAN 5 years? Yes <input type="checkbox"/> No <input type="checkbox"/>
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If all or part of the crop has been grown at this location for LESS THAN 5 years, describe previous land use

Adjacent Properties (check all that apply):

<input type="checkbox"/> Crop production	<input type="checkbox"/> Dairy or livestock operation	<input type="checkbox"/> Watershed (river, stream, pond, lake)	<input type="checkbox"/> Manure dumping or storage
<input type="checkbox"/> _____ Other	<input type="checkbox"/> Residential with operating septic system	<input type="checkbox"/> Commercial or industrial development	<input type="checkbox"/> Municipal or private dumping site

Adjacent and Previous Land Use Policy (fill in below or attach policy):

Applicable documentation (check all that apply):

- Additional information sheet (for previous and adjacent land use)
- Map indicating adjacent properties, presence of manure/biosolids storage areas, manure lagoons, livestock/dairy facilities, grazing areas, and flooding areas.
- Verification checklist (for evidence of flooding, presence of domestic or wild animals)
- Soil chemical and/or microbiological test results (if previous land use indicates potential hazards)

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Water Quality (fill in or attach policy):

Water source:

<input type="checkbox"/> Municipal water City: _____	<input type="checkbox"/> Private well water Number: _____	<input type="checkbox"/> Surface water Source: _____
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Applicable documentation: (check all that apply)

<input type="checkbox"/> Annual water bill with analysis results	<input type="checkbox"/> Laboratory analysis	<input type="checkbox"/> Monitoring checklist	<input type="checkbox"/> Well condition & maintenance documentation
<input type="checkbox"/> Laboratory analysis	<input type="checkbox"/> Laboratory analysis	<input type="checkbox"/> Laboratory analysis	<input type="checkbox"/> Treatment procedure and schedule

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Water Use and Source (check all that apply):

Use/Source	Municipal/City	Private Well	Surface Water
Drinking	<input type="checkbox"/>	<input type="checkbox"/>	Not permitted
Hand Washing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleaning food contact surfaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irrigation: <input type="checkbox"/> None <input type="checkbox"/> Overhead sprinkler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Drip <input type="checkbox"/> Furrow <input type="checkbox"/> Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fertilizer application	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pesticide/Fungicide application	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*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 air contamination.

Drinking water policy:

Drinking water policy: Potable drinking water is provided and available for workers in the packinghouse and in the field. All employees are notified of this policy during training and instructed to notify their supervisors if water is not available or if disposable cups are not available. No glass containers are allowed.

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Sewage, Manure and Biosolids

Sewage Treatment (check all that apply):

Municipal Captive System Portable containment system

Cleaning and Maintenance of Portable Toilets:

Performed by grower Contracted service No Portable Toilets at this site

Manure and Municipal Biosolids

If no animal manure or biosolids are used as soil amendments, check the box below; no further action is needed in this section.

Raw or composted animal manure IS NOT used or stored at this site.

Soil Amendments applied at this location (check all that apply):

No manure or municipal biosolids are applied to soil Raw manure is applied to soil Composted manure or municipal biosolids are applied to soil

Manure handling and storage:

No manure or municipal biosolids are stored on the premises Raw manure is stored at this location Municipal biosolids are stored at this location

Practices followed at this site (Check all that apply):

Raw animal manure is used as a soil amendment at this site

Animal manure is composted at this site using an active process

Animal manure is composted at this site using a passive process

Municipal biosolids are applied to soil at this site

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Policy (fill in or attach policy for handling of manure and biosolids):

Applicable documentation (Check all that apply):

Verification checklist (for safe storage and handling practices)

Raw manure application procedures (date, source, timing, rate)

Onsite compost preparation procedure (composition temp, time, duration)

Compost/biosolids certificate of analysis (if purchased from outside vendor)

Map indicating location of manure/biosolids storage and/or composting areas, manure lagoons, livestock/dairy facilities on this property

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Facilities

Buildings/Structures/Storage Areas and Facilities (fill in below or attach policy):

Applicable documentation (Check all that apply):

Additional information sheet (for upkeep and maintenance policies)

Verification checklist (for evidence of cleaning and maintenance practices)

Training policy and log

Cull piles/debris/trash removal policy

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Preharvest Activities

Agricultural activities conducted at this site:

Crop production only Both crop **and** animal production Animal production only

Crop(s)/Livestock grown on this property: (acres owned, leased, contracted, or consigned for each crop):

Additional crops documented on separate sheet

Crop(s)/Livestock	Area under cultivation/livestock production (acres)
1)	
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	

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Agricultural Chemical Storage and Application (fill in below or attach policies):

Agricultural chemicals are not stored or used on this site.

Agricultural chemicals are stored:

In an area dedicated only to agricultural chemicals

In a clearly identified location (sign on door)

In a locked or controlled-access location

In a covered, clean, dry location that is temperature appropriate (above freezing)

With labels/identification intact and legible (product name, active ingredient, manufacturer)

In a manner that maintains the integrity of the container and prevents leakage (closed bag, container with lid)

With material safety data sheets (MSDS) for appropriate products available for easy access

Applicable documentation (Check all that apply):

Additional information sheet (for policies related to application of pre-harvest treatments)

Verification checklist (for evidence of safe pre-harvest practices)

Training policy and log (sanitary harvesting and handling instructions)

Chemical Application Training Documentation

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Harvesting, Field Packing, Post-harvest, and Transportation Policies (fill in below or attach policies):

Additional information sheet (for harvesting policies)

Verification checklist (for evidence of safe harvest, handling, and transportation practices)

Training policy and log (sanitary harvesting and handling instructions)

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Cold Chain Management (fill in below or attach policies):

Applicable documentation (Check all that apply):

- Additional information sheet (for maintaining temperature policies)
- Verification checklist (for evidence of safe harvest, handling, and transportation temperatures)
- Training policy and log (temperature management)

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Strategies During Harvest

Harvest Early



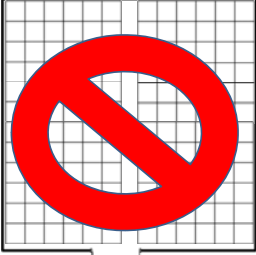
Utilize Shade



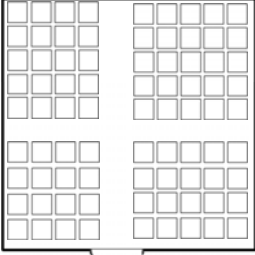
Photo Credit: Tracy, Richard. Global Cold Chain Alliance
<http://www.wilsoncenter.org/sites/default/files/Paper%2017%20Tracy.pdf>

Walk in Cooler Usage

Top View – Walk-in Cooler



80in.



86in.

Packinghouse (fill in below or attach policies):

Packinghouse Practices (check all that apply):

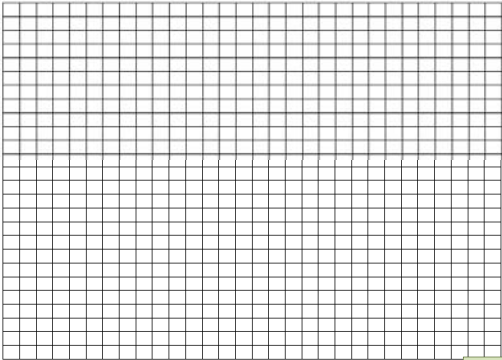
- Raw product is received from external sources (not affiliated with our operation) for processing in the packinghouse
- Water/ice is in contact with product or food contact surfaces during packinghouse activities
- Produce is washed in the packinghouse
- Antimicrobial chemicals are used in the wash water
- Instruments are used to measure temperature, pH, and/or antimicrobial levels
- Packinghouse workers are trained in applicable policies and procedures

Applicable documentation (Check all that apply):

- Additional information sheet (for packinghouse policies)
- Verification checklist (for evidence of packinghouse cleaning and maintenance)
- Training policy and log (temperature management)

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Packing Flow Diagram



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Traceability and Recall (fill in below or attach policies):

Applicable documentation (Check all that apply):

- Corrective action procedure
- Training in traceback, recall, and corrective action procedures?
- Sales records
- Labeling protocol and label template
- List of buyers and up to date contact information

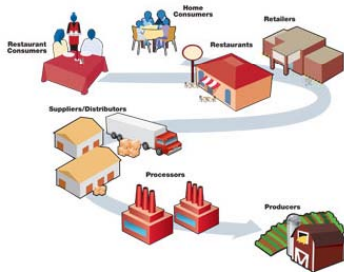
Mock Recall (fill in below or attach policies):

- Mock recall form
- Fax or email buyer acknowledgement of successful mock recall

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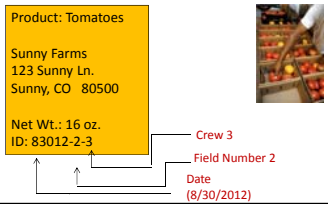
Traceability

- ✓ Record keeping system designed to track the flow of product or product attributes through the production process or supply chain

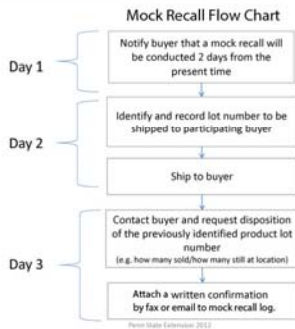


Documenting Traceability on the Farm

- 1) Map all production fields or greenhouses
- 2) Assign numbers to identify specific growing areas
- 3) Mark all packages with date, location, and crew members
- 4) Put the harvest date and location ID on each invoice



Mock Recall



Mock Recall Log

Date conducted: _____

Buyer name: _____

Buyer contact information: Phone: _____ Fax: _____ Email: _____

Harvest information		Shipping information			Mock recall information		
Product name / Shipping unit	Date / time harvested	Date / time shipped	Lot number	Amount shipped	Date / time buyer contacted	Amount of product remaining at buyer site	Amount of product sold by buyer
Mock Recall results:							
Attach buyer confirmation of successful mock recall to this form.							
Reviewed by: _____ Title: _____ Date: _____							

Fundamentals of Creating a Colorado Farm Food Safety Plan

Where is this material found?

Colorado State University Extension:
<http://farmtotable.colostate.edu/>

Slides
 Recorded Webinar
 Notes
 Farm Food Safety Plan Template
 Sample Documents
 Additional Resources

References/Resources

Farm Food Safety, Pennsylvania State University <http://extension.psu.edu/food-safety/farm>

Good Agricultural Practices: A Self-Audit for Growers and Handlers
<http://ucce.ucdavis.edu/files/filelibrary/5453/4362.pdf>

Good Agricultural Practices, Joint Institute for Food Safety and Applied Nutrition
<http://www.ifsan.umd.edu/training/gaps.php>

National Good Agricultural Practices Network for Education and Training, Cornell University. Available from:
<http://www.gaps.cornell.edu/>

On-Farm Food Safety Project, Available from: <https://onfarmfoodsafety.org/resources/audit-questions/>

Produce Safety Alliance, Cornell University. Available from: <http://producesafetyalliance.cornell.edu/psa.html>

USDA Audit Check List
<http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5050869>

USDA Audit Score Sheet
<http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5050871>

Acknowledgements

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- Luke LaBorde, Assoc. Professor, Dept. of Food Science, Penn State University

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