USDA GAP/GHP Audit Training

Paul Priyesh Vijayakumar, Food Systems Innovation Center

Mark Williams, Dept of Horticulture

COOPERATIVE EXTENSION SERVICE
UK UNIVERSITY OF KENTUCKY
College of Agriculture, Food and Environment

FSIC Food Systems Innovation Center

THE FOOD CONNECTION @ UK

BLUEGRASS FARM-TO-TABLE

USDA GAP/GHP Audit Sections

Audit Program	Scopes	Total Points (To pass)	Description
General	Mandatory – Every Audit	180 (144)	a. Food Safety Plan b. Traceability c. Worker Health and Hygiene d. Pesticide/Chemical Use
Good Agricultural Practices (GAPs)	I. Farm Review	190 (152)	a. Water Usage b. Soil Amendments c. Animals/Wildlife/Livestock d. Land Use & Land Use History
	II. Field Harvest and Field Packaging Activities	185 (148)	<u>Pre-harvest and Assessment</u> • Toilet/Wash Facilities • Potable Water Availability • Harvest Containers/Equipment • Unauthorized Entry • Domestic/Wild Animal – Crop Damage • Physical Contamination • Isolation of Fuels and Chemicals • Isolation of Contaminated Area During Harvest • Physical, Chemical, & Biological Hazards • Transportation Equipment • Emergency Clean-up Procedures
Good Handling Practices (GHPs)	III. House Packing Facility	290 (232)	• Water Use in Packing Facility • Treatment of Processing Water • Sanitation Program/General House Keeping • Worker Health and Hygiene • Harvest Containers • Pest Control
	IV. Storage and Transportation	255 (204)	• Mechanical Equipment • Ice and Refrigeration • Transportation and Loading

Audit Process

- Mastering the Inspection Process:

Foundation	Understanding the basics of the GAP audit process
Critical	Prioritize safety concerns based on risks relevant to your farm Resources are available to address the risk

- Proper Preparation and Knowledge of Scoring Criteria

Minimize time and expense (Food Safety Practices & Record Keeping)

Increases chances of passing

Before Scheduling an Audit – Plan!

A. Crop harvest windows:

- Timing your audit – maximize the value of the certification

<u>Single crop certification:</u>

- Short – production season, e.g., strawberries
- Schedule your audit at the beginning of the production season
- Long – production season (i.e.,> 30 days), e.g., leafy greens
- Time you audit to get the most out of the 12 months

- NOTE: Second unannounced audit

Before Scheduling an Audit – Plan!

Multiple crops certification:

Schedule audit – largest variety of crops being harvested

B. Food Safety Manual:

- Complete before requesting an audit
- Need to submit a copy along with audit request

C. Food Safety Officer:

- Must name someone
- You, co-operators, or farm management staff

Preparation

- Documentation and Logs in Place
  - Full Points!!!!!!
- Policy and procedures - Revision with employees (Auditor might interview)
- Water test results and mock recall paper work in manual
- Diversified farm – several crops
  - list them in categories and corresponding acreage
  - Crop specific audit – mention that specific crop

Audit Request

- Include several dates
- State the time of harvest
- Send request for audit services form to state inspection agency
  - Farm contact information
  - Farm information (commodities and acres)
  - Type of Audit GAP or GHP
  - Preferred dates
- Audit Costs
- Administration Fee - $50
- Time - $92/hr
  - Travel to your farm
  - Audit time
  - Travel from your farm

Audit Day

- Auditor:
  - Confirms audit sections
  - Reviews records and documents
  - Requests copies of field map and traceability records (e.g., lot numbers on boxes)
  - Farm tour
    - Converse with people on site
    - Restroom examination
    - Equipment conditions
    - Crop production areas
  - Scoring your operation
  - Closing meeting
    - Review of auditor notes
    - Corrective action review
    - Score report

Record Keeping

- Proper paper work - 65-75% points for section
- Key paper work for GAP/GHP audit

1. RECORD:
   Proves that an action was taken
   E.g., Pre-harvest checklist, activity logs (cleaning schedule)

2. POLICY:
   Written safety procedures in a food safety plan
   E.g., Sick employees will not work with produce

3. DOCUMENT:
   Could be a combination of 1 & 2
   E.g., Health and hygiene policy statement signed by employees after training

Audit Scoring and Overarching Conditions

- GAP/GHP Audit Scoring
- Each question is given 5, 10 or 15 points weighed depending on the relative associated risk
- No partial points for any question
- Minimum 80% score on each scope is a must and “No Unsatisfactory Condition” can be present

Audit Scoring and Overarching Conditions

- Overarching conditions apart from scoring if observed
- Result = “Automatic Unsatisfactory “Immediate food safety risk (during growing, processing, and packaging)
  - Presence or evidence of rodents, excessive amount of insects pests in the production area (during processing, packaging, and storage)
  - Observation of employee practices that jeopardize or may jeopardize the safety of the produce
  - Falsification of records
  - Answering Questions P1 or P2 as “No”

General Questions

Implementation of a Food Safety Program

	Questions	Points	Yes	NO	N/A	Doc
P-1	A documented food safety program that incorporates GAP and/or GHP has been implemented.					D
P-2	The operation has designated someone to implement and oversee an established food safety program. Name _____					D

General Section:

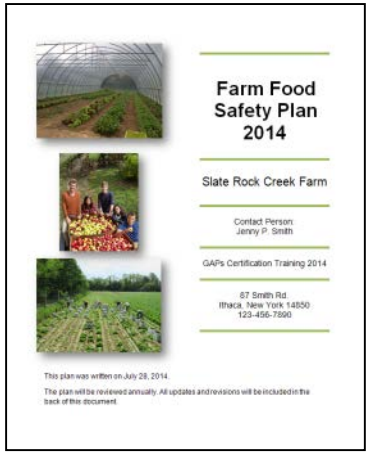
- Food Safety Plan
- Traceability
- Recall Program
- Worker Health and Hygiene
- Pesticide and Chemical Use

Food Safety Plan

- Develop and implement a documented food safety program
- Food safety manual which includes,
  - Standard operating procedures (SOP's), and/or
  - Documentation which outline the operation's policies and
  - Work instructions for adhering to the food safety program.
  - May also contain information or references pertaining to self audits of the program or management reviews of the program.
- Identify a specific person(s) to implement and oversee the food safety program.
  - The person(s) need to be formally identified in the food safety plan, organizational chart, or similar documentation.

Reasons for a Food Safety Plan

1. **Gets you organized and focused on food safety**
   - Describes risks you have identified and actions to address those risks
   - Defines your practices, policies, and SOPs
   - Efficient and effective use of your time and resources by prioritizing most important risk reduction steps
2. **Best way to be prepared!**
   - Buyer questions/requirements
   - Third party audits
   - Food safety practices



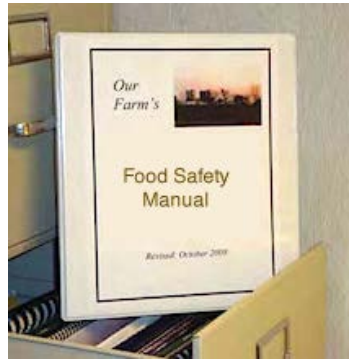
YOU Can Identify and Reduce Risks!

- **Each farm is unique**
  - Practices to reduce risks will be specific to your farm
  - Best done by someone who knows the farm and how it operates
- **Each commodity is different**
  - Grows on ground or in trees
  - Harvest by hand or by machine
  - Single vs. multiple harvests

Who Is YOUR Food Safety Person?

- Each farm needs to have one person to lead the development of the farm food safety plan
  - Will be supported by others on the farm
  - May need a back-up in case person is unavailable
- Must have food safety training and experience to know how to assess risks
- Must have the authority to make necessary changes and invest in resources to reduce risks
- Must be willing to be listed as the food safety contact for the farm and make sure the plan is implemented

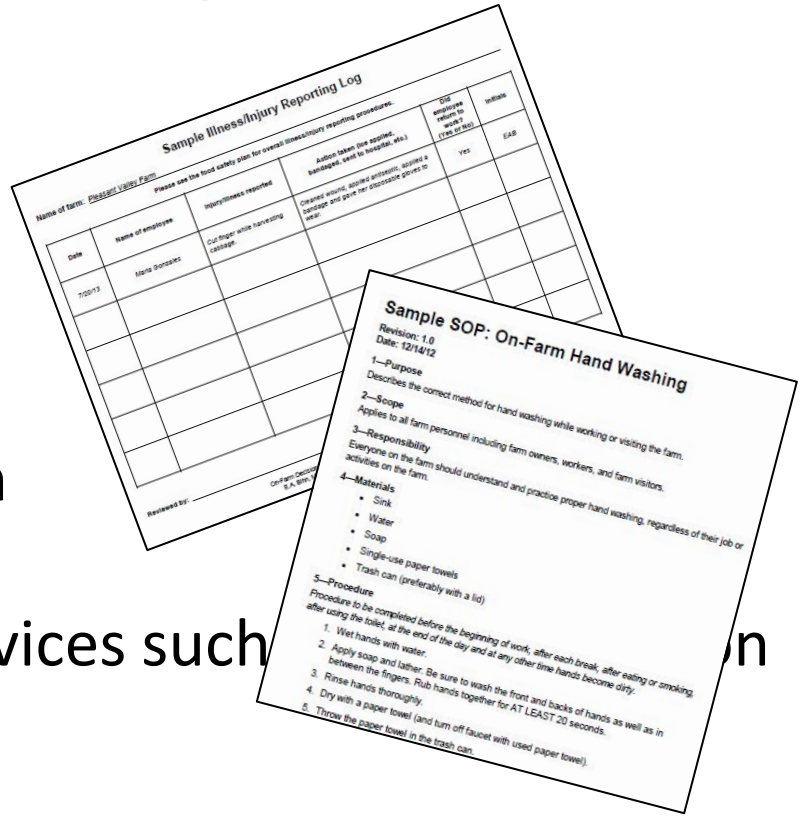
Farm Food Safety Plan Parts



- Farm name and address
- Farm description
  - Commodities grown, farm size, etc.
- Name and contact info for food safety manager
- Risk assessment of practices and environmental conditions on your farm that impact food safety
- Practices outlined to reduce food safety risks
- Records that document practices

Other Items to Include In Your Farm Food Safety Plan

- Farm maps
- Farm policies
- SOPs
- Test results
- Emergency contact info
- Supplier and buyer information
- Traceability and recall plans
- Contact info for contracted services such as sanitation and pest control



Step 1: Assessing Risks

- Review all farm operations to identify practices that contribute to or increase produce safety risks
- Review the farm environment and adjacent land
- Focus on microbial, chemical, and physical risks
- Identify risks that are most likely to occur, making special note if they could happen often
  - Because time and money are limited, you must prioritize which risks to address first

Ranking Your Risks

- Risks that can lead to whole crop contamination
- Risks that have caused previous outbreaks
  - e.g. Cross-contamination from postharvest water, wildlife fecal contamination
- Different or modified farm production practices that may increase risks
  - e.g. Hiring new people, changing processes, retrofitting equipment, changing suppliers

Step 2: Develop Practices to Reduce Risks

- Define practices that will reduce identified risks
  - Use resources and ask for help if you are not sure!
- Know what resources are required to successfully implement practices
  - Human resources (time and/or people)
  - Equipment or infrastructure (may require changes/upgrades)
  - Disposables (hand soap, paper towels, etc.)
- Create a list of tasks/steps that need to be done
- Designate a person(s) to be in charge of each task

Step 3: Document and Revise

- WRITE a plan to guide implementation of practices
- SOPs and policies will outline what needs to be done for those who are responsible for completing the task
- Build recordkeeping into a logical flow of activities
- Review and revise your plan if it is not working or when practices change
- Review and update your plan at least annually, or whenever things change

Food Safety Plan Writing Resources:
Be sure to make them your own!

- There are many available resources, including templates – pick which one works best for you
- You must tailor templates to meet **YOUR** needs
- Template plans, recordkeeping logs, and SOPs give you someplace to start and are easier than building it from scratch
- Be sure to make it your own, so you know what is in the plan and that it will work for you

A Few Thoughts About Your Plan…

- Only include practices you are doing on YOUR farm
- Do NOT include things you *wish* you were doing
- Does not need to be long or complicated
- Pick practices and schedules you know you can do
- Focus on risk reduction!

Final Steps

You have written your plan, your practices are in place, records are being kept, and delicious, high quality, safe produce is being grown and packed.

So now what?

TRACEABILITY

The Value of Traceability

- **Following quality**
  - Identifying boxes that have quality issues
- **Keeping track of amount sold**
  - Knowing what sold well and how much money you should be making
- **Following produce safety**
  - Recalling a contaminated load/lot/bin
  - Knowing how much was sold and in the market
  - Knowing who may have purchased/consumed it

Product Tracing:
One Step Forward, One Step Back

- Traceability means identifying where the produce came from **(one step back)** and where it went **(one step forward)**
- For farmers, this means knowing the field where it was grown (step back) and the buyer (step forward)
- This does not mean you are responsible for the entire system, especially if there are multiple steps to the consumer

Understanding a "Lot"

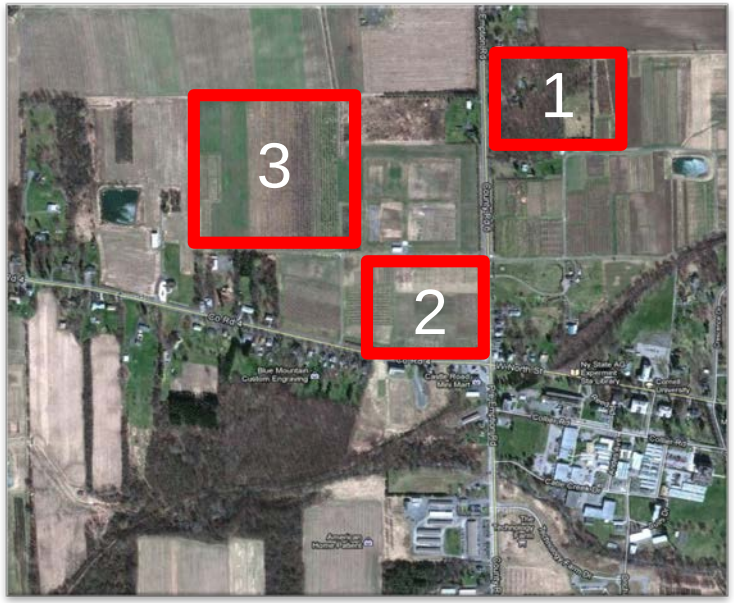
- Product tracing requires defining and following a distinct portion of the crop. This is called a lot.
- A lot is a distinct and limited portion of a crop
  - e.g., all of the same commodity harvested on the same day from the same field
  - It may require establishing a 'clean break'
- Difficult issue: How big should the lot be?
  - If there is a problem, the whole lot will be recalled, so the bigger the lot, the bigger the recall

Developing a Lot Code

- Can be numbers or letters, or a combination of both (alpha-numeric)
- Must identify specific details about the lot
  - Farm, field of origin, harvest date, and more
- Must be unique to a specific lot
- Must follow the lot
  - Attached with a label, stamp, or sticker to the sellable container (such as a box)

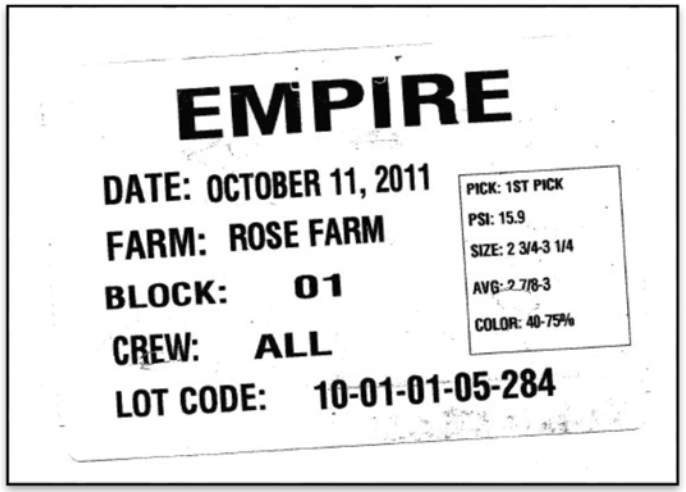
Developing A Lot Code May Involve:

- Identifying your fields
- Identifying commodities and varieties
- Working with Julian dates
- Identifying worker crews
- Additional paperwork



A Lot Code Could Identify:

- Commodity including type (e.g., Empire apples)
- Farm of origin
- Field/block of origin
- Harvest date
- Harvest crew
- Packinghouse used (if any)
- Packing date (if different from harvest date)
- Packing crew (if different from harvest crew)



Labeling

- **Each container/lot leaving the farm needs to be identifiable**
- **Attaching the lot code to the lot**
  - Many ways to get it done
  - Stickers, stamps, bar codes
  - Boxes, clamshells, or individuals pieces
- **Determine the best system for your farm**
  - Size, markets, costs, infrastructure
  - Electronic or paper

Testing Your Produce Tracing: **Conducting a Mock Recall**

- **Steps in a mock recall**
  1. Select a lot code that has been sold
  2. Call a buyer that received some or all of the lot
  3. Tell them you are conducting a MOCK recall
  4. Ask how much of the product is in stock and how much has been sold. Document the response.
  5. Trace the lot in your records (field of origin, etc.)
  6. Can you trace it backward and forward? *Yes, good! No, figure out the problem. Either way, Document it!*

What's in the Checklist?

USDA Good Agricultural Practices and Good Handling Practices
Audit Verification Checklist

General Questions

Implementation of a Food Safety Program

	Questions	Points	Yes	NO	N/A	Doc
P-1	A documented food safety program that incorporates GAP and/or GHP has been implemented.					D
P-2	The operation has designated someone to implement and oversee an established food safety program. Name _____					D

What's in the Checklist?

Traceability

	Questions	Points	Yes	NO	N/A	Doc
G-1	A documented traceability program has been established.	15				D
G-2	The operation has performed a "mock recall" that was proven to be effective.	10				R

Worker Health and Hygiene

- **Can carry human pathogens**
  - *Shigella*, Hepatitis A, Norovirus, and others
- **Can spread human pathogens**
  - Harvest and pack with their hands
  - Fecal-oral route
- **Require training to reduce risks**
  - Proper hand washing
  - How to handle injuries

Routes of Contamination

Feces

Clothing

Hands

Footwear

Illness/Injury

Importance of Training Workers

- Fresh fruits and vegetables often receive no additional processing (such as cooking), so any contamination can result in illness when the produce is consumed
- Workers need to use food safety practices everyday to reduce produce safety risks
- Food safety skills are not innate, so training is required

Visitors

- Are responsible for following the farm's food safety practices and policies
- Must review the farm's food safety policies and signs
- Know the location of toilets and sinks
- Must wash their hands
- Must not visit if they are sick
- Must keep pets at home

Everyone Needs Training

- Implementing food safety practices is a company wide task
  - Managers, farm workers, office staff, volunteers, interns, family members
- Everyone needs to know how to identify and reduce food safety risks
  - Practices they are responsible for doing
  - How to report food safety risks they see
- Owners, managers, and supervisors must set example and follow company policies!

Potential Training Challenges

- Time for training
- Language
- Literacy level
- Training mid-season
- Variation in hygiene practices and expectations
- Misconceptions/misperceptions

Developing a Training Program

- **Every training program should have:**
  - A schedule for training workers to ensure everyone receives training
  - A qualified person responsible for training and supervising
  - Educational materials (videos, pamphlets, handouts) that explain the farm food safety policies, expectations, common risks, and corrective actions
  - A process for documenting the training
  - SOPs to guide workers after the training

Worker Training Programs MUST Include:

- How to properly use toilets and wash hands
- Importance of personal cleanliness
- What to do when injured or ill
- How to implement practices to reduce food safety risks while working
- How to communicate food safety risks with managers/supervisors

Common Risks On The Farm

- **Workers should be told to:**
  - Evaluate contamination risks before and during harvest such as significant animal activity, presence of fecal matter, damaged crops, or extensive animal tracks
  - Never harvest produce destined for the fresh market that is visibly contaminated with feces
  - Only use clean harvest and packing containers
  - Inspect vehicles for cleanliness before loading

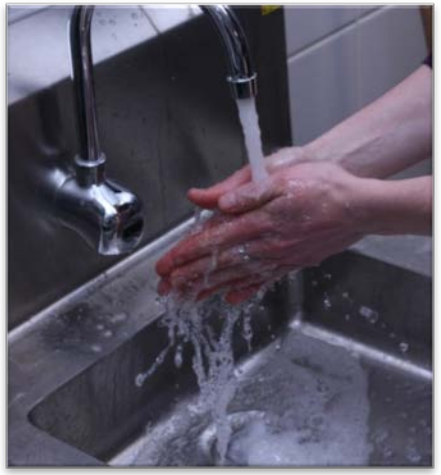
Proper Use of Toilets

- All urination and defecation should be done in a toilet, NEVER in the field or nearby production areas
- Toilet paper should be deposited into the toilet, not in a garbage can or on the floor
- Always wash hands after using the toilet

When Should Hands Be Washed?

- After using the toilet
- Before starting or returning to work
- Before and after eating and smoking
- Before putting on gloves
- After touching animals
- Any other time hands may become contaminated

Proper Hand Washing



1. **Wet hands** with water.
2. **Apply soap and lather.** Be sure to wash the front and backs of hands as well as in between the fingers. Rub hands together for AT LEAST 20 seconds.
3. **Rinse** hands thoroughly with clean water
4. **Dry** with a paper towel (turn off faucet with used towel)
5. **Throw** the paper towel in a trash can.

Antibacterial hand sanitizers CANNOT replace hand washing

Resources That MUST Be Provided:

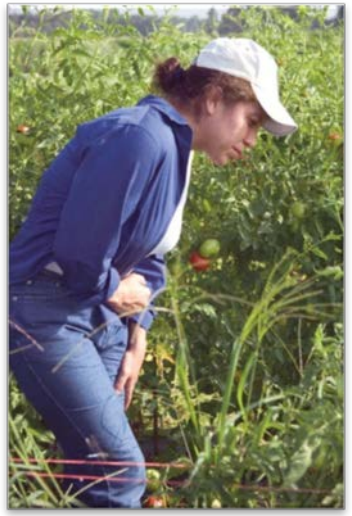
- Toilets
- Toilet paper
- Soap
- Clean water
- Paper towels
- Garbage cans
- First Aid Kit
- Break Areas

Toilet & Hand Washing Facilities

- Provide a sufficient number of toilets and sinks to meet worker and visitors' needs
  - OSHA requires one facility per 20 workers of each gender and within ¼ mile or a 5 minute walk of the working area
- Facilities must be fully serviced on a regular schedule
- Toilet and hand washing facilities must be well stocked and monitored everyday when in use
- Restocked and cleaned as necessary

Worker Illness

- Workers who are sick or show signs of illness may contaminate fresh produce
- Ill workers must not handle fresh produce and should not come to work
- Symptoms of illness may include:
  - Nausea
  - Vomiting
  - Diarrhea
  - Fever
  - Jaundice



Worker Injury

- **Injuries must be addressed and reported**
  - A first aid kit must be available, stocked, and monitored to replace used or outdated materials
  - Clean and bandage all wounds
    - If the wound is on the hands, a glove should be worn to create a double barrier
  - Discard any produce that may be contaminated
  - Clean and sanitize any items that came in contact with bodily fluids
  - Report all injuries to your supervisor

Drinking Water & Break Areas

- Workers should be provided with drinking water to reduce the risks of heat exhaustion
- Break areas do not need to be a separate building, but must be in a designated area
- Healthy workers are better able to do their jobs and implement food safety practices!

Worker Clothing

- Clean clothes should be worn each day
- Footwear cleanliness is important
  - Designated footwear to prevent cross contamination
- Gloves, if worn, must be changed when they become contaminated or torn
  - If reusable gloves are used, clean often
- Aprons, gloves, and other food safety equipment should be removed before using the toilet and should be stored in a clean, designated area when not in use

Reinforcing Food Safety Practices

- Post signs and reminders
  - Place signs where they will be seen often
  - Pictures are often better than words
  - Use appropriate language

- Conduct review and refresher training sessions throughout the season or when a problem arises
- Develop and document ‘tailgate’ reviews before beginning work each day or week

Monitoring

- **Develop a monitoring process to ensure:**
  - Workers are following food safety practices and farm policies everyday
  - Facilities are available, clean, and well stocked everyday
- **This can include:**
  - Training supervisors to observe employee behavior
  - Appointing someone to check facilities each day
  - Using monitoring logs

Corrective Actions

- Workers are not following food safety policies
  - Benefits for good behavior (carrots)
  - Deterrents for bad behavior (sticks)
- Facilities are not cleaned, restocked or are broken
  - Sanitation company contact on speed dial
  - Retraining workers or improving monitoring process
- Facilities leak in the field or packinghouse
  - Emergency plan for spills

Recordkeeping

- Document actions taken to support worker health, hygiene, and training on the farm such as:
  - Worker training programs
  - Monitoring and restocking of toilet and hand washing facilities
  - Illness and injury reporting
  - Restocking of first aid kits

What's in the Checklist?

Worker Health & Hygiene

Questions		Points	Yes	NO	N/A	Doc
G-3	Potable water is available to all workers.	10				R
G-4	All employees and all visitors to the location are required to follow proper sanitation and hygiene practices.	10				P
G-5	Training on proper sanitation and hygiene practices is provided to all staff.	15				D
G-6	Employees and visitors are following good hygiene/sanitation practices.	15				
G-7	Employees who handle or package produce are washing their hands before beginning or returning to work.	15				
G-8	Readily understandable signs are posted to instruct employees to wash their hands before beginning or returning to work.	10				
G-9	All toilet/restroom/field sanitation facilities are clean. They are properly supplied with single use towels, toilet paper, hand soap or anti-bacterial soap, and potable water for hand washing.	15				
G-10	All toilet/restroom/field sanitation facilities are serviced and cleaned on a scheduled basis.	10				R

What's in the Checklist?

	Questions	Points	Yes	NO	N/A	Doc
G-11	Smoking and eating are confined to designated areas separate from where product is handled.	10				P
G-12	Workers with diarrheal disease or symptoms of other infectious diseases are prohibited from handling fresh produce.	15				P
G-13	There is a policy describing procedures which specify handling/disposition of produce or food contact surfaces that have come into contact with blood or other bodily fluids.	15				P
G-14	Workers are instructed to seek prompt treatment with clean first aid supplies for cuts, abrasions and other injuries.	5				P
G-15	Company personnel or contracted personnel that apply regulated pre-harvest and/or post harvest materials are licensed. Company personnel or contracted personnel applying non-regulated materials have been trained on its proper use.	10				R

GAP Part – 1
Farm Review

- Water use
- Soil Amendments
- Animals/Wildlife/Livestock
- Land Use & Land History

Water use

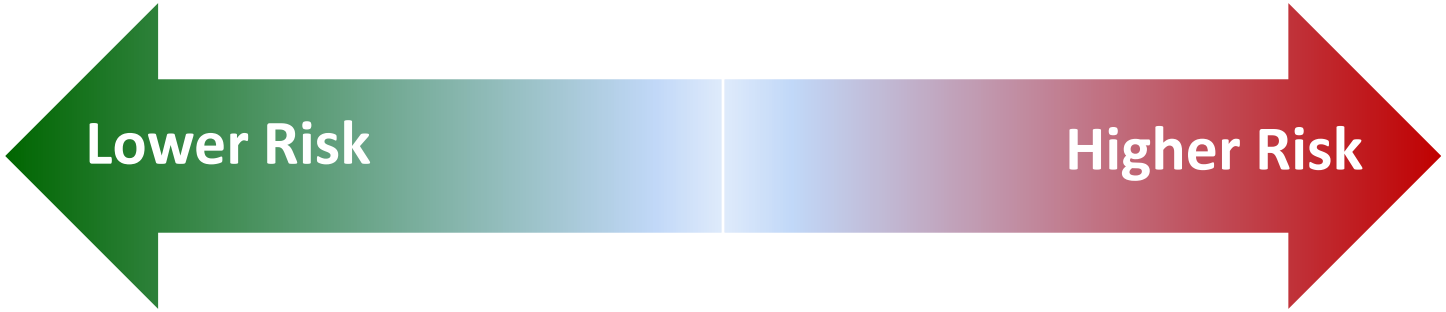
Two Sections on Water

- **Part I: Production Water**
  - Water used in the field during crop growth
  - Irrigation, mixing and foliar sprays, frost protection
- **Part II: Postharvest Water**
  - Water used at or after harvest

Evaluating Risks Related to Production Water

- Three primary areas to assess for produce safety risks related to production water are:
  1. **Production water source and quality**
     - Public water system, well, surface water
     - Testing frequency and sampling location
  2. **Application methods**
     - Direct or indirect contact with the harvestable portion
  3. **Timing of application**
     - At planting or close to harvest

Probability of Contamination



Public Water Source

Treated

Ground

Protected

Surface

Open to Environment

Preventing Contamination of Surface Water Sources

- Assess nearby land use and upstream water activities to identify risks
  - Work with neighbors and local watershed groups to understand and minimize identified risks
- Assess run-off risks
  - Develop berms or containments to minimize run-off from manure and compost piles, livestock feeding areas, or storm run-off
- Monitor and control animal access to irrigation water sources where practical (e.g., irrigation reservoirs)

Preventing Well Water Contamination

- Inspect well to ensure it is in good condition
- Inspect well head to ensure it is properly capped and elevated
- Be sure land slopes away from well head to prevent run-off contamination into the well
- Install backflow prevention devices, when possible

Preventing Public Water System Contamination

- Public water systems are treated to meet microbial drinking water standards, but agricultural water delivery systems can fail, therefore:
  - Assess the delivery system downstream of the connection to the public water system
  - Test the water if you have any concerns
  - Have a back-up plan if the water source is suspected to be unsafe

Less Contact with Water = Lower Risk

A key risk assessment question is:

“Does the water contact the harvestable portion of the crop?”

- If the answer is “never”, the risk from water is very low
- If the answer is “only during germination or crop establishment”, the risk is reduced
- If the answer is “yes”, the quality of the water and the timing of the application should be assessed

Water Quality Criteria

- Applies to water used in *direct contact* with the harvestable portion of the crop
- **All water must be:**

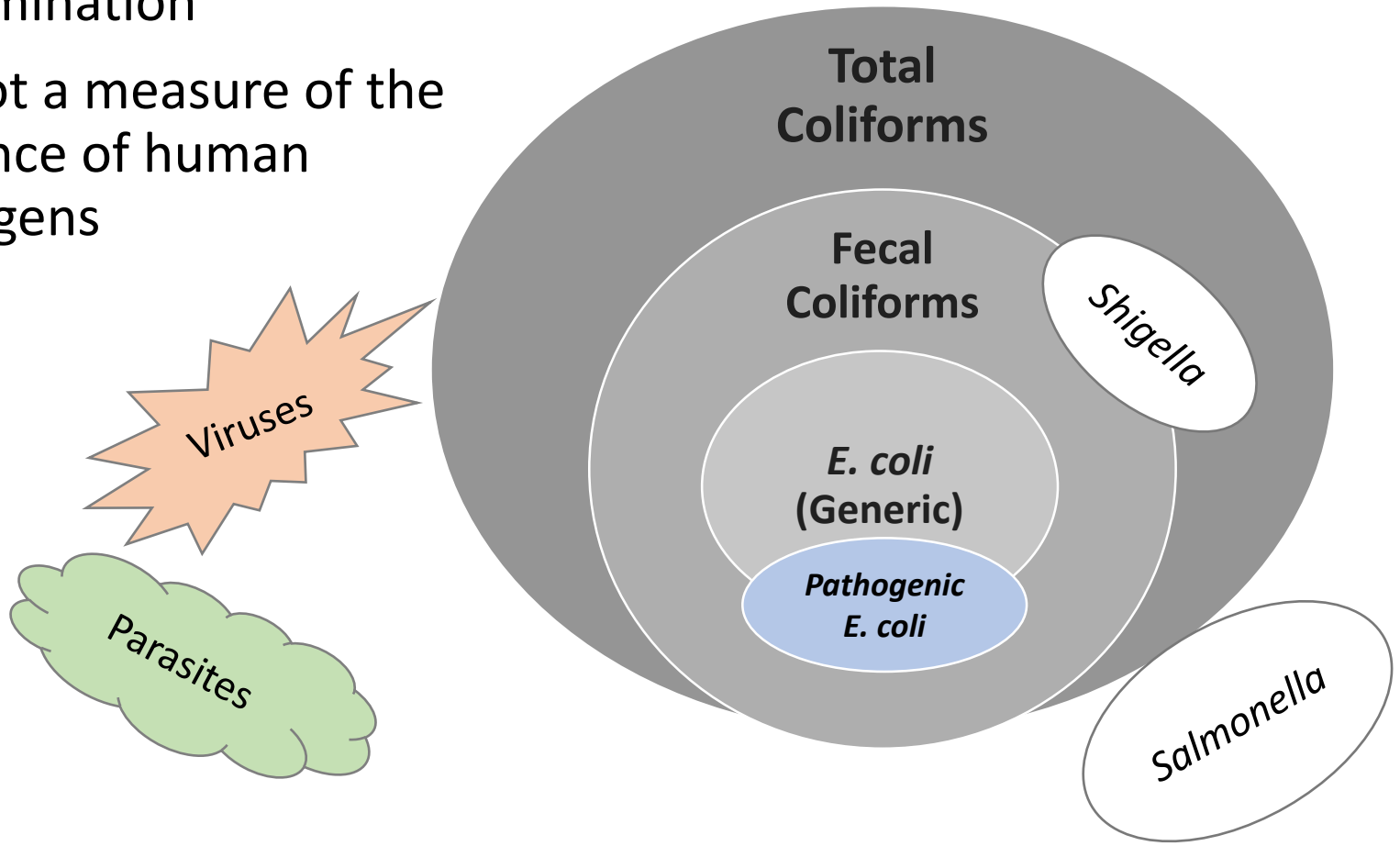
  ≤ **126 CFU/MPN** generic *E. coli* per 100 ml water geometric mean

  and

  ≤ **410 CFU/MPN** generic *E. coli* per 100 ml water statistical threshold value

Generic *E. coli* Is An Indicator Organism

- Generic *E. coli* is intended to indicate the likelihood of fecal contamination
- It is not a measure of the presence of human pathogens



Where Do I Go For Testing?

- Find a lab that uses certified methods for analyzing water samples (AOAC, APHL, or BAM methods)
- Be certain the lab can provide the test you need
  - Quantitative (numerical) versus presence/absence
  - Upper limit of test within range of compliance
- Be sure to follow all lab instructions
  - Follow all sampling, labeling, handling, and delivery instructions

Collecting Water Samples

- Follow all sample submission instructions from laboratory
- A sterile bottle must be used to collect samples
- Do not rinse bottle before sampling
- Do not stir up bottom sediment
- In a distribution system, allow the water to run before sampling in order to collect a representative sample

Where do I collect samples?

- **Surface water**
  Take samples closest to the intake
- **Ground water**
  Sample from well tap
- **Municipal water**
  Testing reports from the municipality are sufficient, but sampling from different points in the distribution system can be useful

Recordkeeping

- Keep copies of all water test results
- Document all monitoring and actions to reduce risks
  - Inspection of water system
  - Protection of water sources from contamination
  - Water use practices
  - Application to harvest die-off calculations
  - Monitoring effectiveness of water treatments
  - Corrective actions taken, if any
- Keep copies of any scientific research used to support testing, calculations, or treatment of water sources

Post Harvest Water Applications

- USDA GAP&GHP program requires that the water used meet the microbial requirements of the US EPA Drinking Water Standard.

- Any post harvest water use which does not meet this standard will result in an “automatic unsatisfactory” assessment on the audit.

Many Postharvest Water Uses

- Rinsing/washing
- Commodity movement (i.e., dump tanks/flumes)
- Cooling
- Ice making
- Postharvest fungicide and wax
- Hand washing
- Cleaning and sanitizing

Postharvest Water Management

- **Water**
  - Must know initial quality and intended use
  - How it interacts with the sanitizer and produce
- **Sanitizer**
  - Adding a sanitizer to water is **NOT** intended to “sanitize” the product, but instead to prevent cross-contamination
  - Must be food grade
  - Many sanitizers available, including organic options

Water Quality Criteria for Harvest & Postharvest Activities

- Water used for the following activities must have no detectable generic *E. coli* at the start of use
  - Directly contacting produce during or after harvest
  - Used on food contact surfaces
  - Used for hand washing
  - Used for sprout irrigation water
  - Making agricultural tea
  - Making ice

Single Pass Water

- Must not have any detectable generic *E. coli*/100 mL
- Adding a sanitizer is not required, but strongly recommended
- Helps prevent the build-up of microorganisms in equipment and on food contact surfaces

Recirculated and Batch Water

- Must not have any detectable generic *E. coli*/100 mL water at the beginning of use and maintain quality throughout use
- Sanitizer must be added to the water to reduce cross-contamination risks
- Must use a sanitizer that is labeled for contact with fruits and vegetables
- Establish a schedule for changing batch water or a process for minimizing the build-up of organic material in the water

Key Water Quality Variables

- **Quality at start of use**
  - No detectable generic *E.coli*
- **pH**
  - Can impact sanitizer effectiveness
- **Temperature**
  - Impacts some sanitizer's 'rate of kill' and stability
  - Impacts infiltration risks
- **Turbidity**
  - Can impact sanitizer stability and effectiveness
  - Can be used as an indication of when to change your water

Choosing a Sanitizer

- **A common sanitizer is chlorine**
  - Affordable and available
  - Corrosive, highly reactive
- **Many other options**
  - Ozone, peroxyacetic acid, hydrogen peroxide, etc.
- **Organic options are available**
  - Tsunami, Spectrum, Sanidate, VigorOx 15 F&V, etc.
  - Check with organic certifier
- **Must be food grade and labeled for use on produce**

What's in the Checklist?

Part 1 - Farm Review

Water Usage

(1-1) What is the source of irrigation water? (Pond, Stream, Well, Municipal, Other) Please specify:

(1-2) How are crops irrigated? (Flood, Drip, Sprinkler, Other) Please specify:

	Questions	Points	Yes	NO	N/A	Doc
1-3	A water quality assessment has been performed to determine the quality of water used for irrigation purpose on the crop(s) being applied.	15				D
1-4	A water quality assessment has been performed to determine the quality of water use for chemical application or fertigation method.	15				D
1-5	If necessary, steps are taken to protect irrigation water from potential direct and non-point source contamination.	15				

Sewage Treatment

	Questions	Points	Yes	NO	N/A	Doc
1-6	The farm sewage treatment system/septic system is functioning properly and there is no evidence of leaking or runoff.	15				
1-7	There is no municipal/commercial sewage treatment facility or waste material landfill adjacent to the farm.	10				

Animals/Wildlife/Livestock

Assessing Risks: Wildlife

- Do you find wildlife feces in your produce fields?
  - How often? Is it widely distributed? Is it in contact with produce?
- Is your farm in an area that large numbers of animals visit (e.g., flocks of migrating birds, herds of deer)?
- What management practices can limit wildlife contamination of produce fields and water sources?

Co-Management Considerations

- Co-management considers both food safety and conservation of natural resources
- Operations shall also consider any local, state or federal mitigation strategies for wild animals
- Practices which minimize the risk of fecal contamination and microbiological hazards associated with food production while simultaneously conserving soil, water, air, wildlife and other natural resources
- Removal of conservation practices can damage natural resources (e.g., soil, water, wildlife) and may *increase* food safety risk

Deterring Wildlife

Decoys

Fencing & Netting

Deterring Wildlife

Visual Deterrents

Noise Deterrents

Relocation

Assessing Risks: Domestic Animals

- Are domestic animals allowed in the field while the crop is present as part of the production process?
  - Are they working animals?
- Are workers aware of cross-contamination risks from fecal contamination of hands, clothing, shoes, and equipment after handling animals or fecal material?
- Is the production ground rotated into grazing land?
  - If so, manure present on the ground may mean extending the period of time between when animals grazed and when produce can be planted

Working Animals

- Only use work animal in fields when edible portion of crop is NOT present
  - Establish animal paths to minimize contact with produce
  - Have corrective action plans if work animals are in field when edible portion of crop is present
- Anyone working with the animals should understand risks and be trained to minimize risks
- Develop SOPs for animal and manure handling
  - e.g., hand washing, cleaning and sanitizing tools, practices to complete after handling animals

Example of Recordkeeping

Sample Wildlife and Domestic Animal Monitoring Log

Name of farm: *Pleasant Valley Farm*

Please see the food safety plan for overall wildlife and domestic animal management, monitoring, and corrective actions. Attach any relevant pictures, maps, or other notes about the monitoring or intrusion event to this recordkeeping sheet.

Date	Field or location	Animal activity or intrusion event noted (yes or no)	Corrective actions (CA) taken	Date CA implemented	Initials
2/2/13	*West Field (Field #2 planted to cabbage).*	*Yes, a few deer tracks through field.*	*None. Determined the tracks were few, no fecal material present, and tracks crossed over road to corn field. Will monitor weekly.*	*6/2/13*	*GW*

Reviewed by: _____ **Title:** _____ **Date:** _____

Animals/Wildlife/Livestock

Animals/Wildlife/Livestock

Questions		Points	Yes	NO	N/A	Doc
1-8	Crop production areas are not located near or adjacent to dairy, livestock, or fowl production facilities unless adequate barriers exist.	15				
1-9	Manure lagoons located near or adjacent to crop production areas are maintained to prevent leaking/overflowing, or measures have been taken to stop runoff from contaminating the crop production areas.	10				

Questions		Points	Yes	NO	N/A	Doc
1-10	Manure stored near or adjacent to crop production areas is contained to prevent contamination of crops.	10				
1-11	Measures are taken to restrict access of livestock to the source or delivery system of crop irrigation water.	10				
1-12	Crop production areas are monitored for the presence or signs of wild or domestic animals the entering the land.	5				R
1-13	Measures are taken to reduce the opportunity for wild and/or domestic animals from entering crop production areas.	5				R

Soil Amendments

Assessing Your Risks

- **What type of soil amendments do you use?**
  - Raw manure, composted manure, chemical, green waste, biosolids
- **What crops receive soil amendments?**
  - Fresh produce or agronomic crops
- **When do you apply them?**
  - Days to harvest
- **How do you apply them?**
  - Incorporated, injected, surface applied

Review

- Soil amendments can introduce produce safety risks, especially those that contain raw manure

- To reduce risks associated with soil amendments:
  1. Apply manure when the field is not in production
  2. Treat raw manure using a scientifically valid, controlled process
  3. Extend the time between application of raw manure and harvest

- Make sure storage areas do not contaminate fields, water sources, or packing areas
- Train workers who handle and apply soil amendments
- Develop sanitation steps for tools and equipment
- Keep records of soil amendment applications and treatments

Soil Amendments

Manure and Municipal Biosolids

Please choose one of the following options as it relates to the farm operations:

_____ **Option A. Raw manure or a combination of raw and composed manure is used as a soil amendment.**

_____ **Option B. Only composted manure/treated municipal biosolids are used as soil amendments.**

_____ **Option C. No manure or municipal biosolids of any kind are used as soil amendments.**

Only answer the following manure questions (questions 1-14 to 1-22) that are assigned to the Option chosen above. DO NOT answer the questions from the other two options. The points from the manure and municipal biosolids are worth 35 of a total 190 points, and answering questions from the other two options will cause the points to calculate incorrectly.

Option A: Raw Manure		Points	Yes	NO	N/A	Doc
1-14	When raw manure is applied, it is incorporated at least 2 weeks prior to planting or a minimum of 120 days prior to harvest.	10				R
1-15	Raw manure is not used on commodities that are harvested within 120 days of planting.	10				R
1-16	If both raw and treated manure are used, the treated manure is properly treated, composted or exposed to reduce the expected levels of pathogens.	10				R
1-17	Manure is properly stored prior to use.	5				

Option B: Composted Manure		Points	Yes	NO	N/A	Doc
1-18	Only composted manure and/or treated biosolids are used as a soil amendment.	10				R
1-19	Composted manure and/or treated biosolids are properly treated, composted, or exposed to environmental conditions that would lower the expected level of pathogens.	10				D
1-20	Composted manure and/or treated biosolids are properly stored and are protected to minimize recontamination.	10				
1-21	Analysis reports are available for composted manure/treated biosolids.	5				R
Option C: No Manure/Biosolids Used		**Points**	**Yes**	**NO**	**N/A**	**Doc**
1-22	No animal manure or municipal biosolids are used.	35				P

Land Use & Land History

- Crop production areas and adjacent land use through a documented land use risk assessment.
- Any risks reasonably likely to cause chemical, physical or microbiological contamination of the produce which are identified by the risk assessment must be,
  - Addressed and
  - Crop production area tested to validate the hazard has been addressed.

- Adjacent lands may not be the property of the operation,
  - Effects on the crop production areas needs to be evaluated
  - Mitigation strategies put in place to minimize the impact of the hazard on the ground.

Land Use & Land History

- Flooding caused by the overflow of a body of water shall be,
  - documented and if it occurs in season,
  - an assessment is performed to determine if the flooding contaminated the product.
- If sources of contamination are located in the general vicinity of the crop production areas,
  - Consider testing the product and/or soils before harvesting
- The land use risk assessment shall also consider,
  - the location of the operation's sewage treatment/septic system or
  - nearby municipal/commercial sewage treatment facilities.
- The operation shall also verify their sewage treatment/septic system
  - is functioning properly and does not lead to a contamination risk.

Land Use & Land History

Soils

	Questions	Points	Yes	NO	N/A	Doc
1-23	A previous land use risk assessment has been performed.	5				R
1-24	When previous land use history indicates a possibility of contamination, preventative measures have been taken to mitigate the known risks and soils have been tested for contaminants and the land use is commensurate with test results.	10				R
1-25	Crop production areas that have been subjected to flooding are tested for potential microbial hazards.	5				R

Traceability

	Questions	Points	Yes	NO	N/A	Doc
1-26	Each production area is identified or coded to enable traceability in the event of a recall.	10				R

GAP Part – 2
Field Harvest & Field Packing Activities

Emphasizes harvesting activities, containers and equipment, employee health and hygiene. Not all commodities have to be harvested for the audit.

- Pre-Harvest Assessment
- Field Sanitation Units
- Harvesting Containers Equipment
- Water Use
- Transportation of Produce
- Emergency Clean-Up Procedure

Pre-Harvest Assessment

- The assessment may include statements which address known risk that are applicable to the operation such as:
    - Are toilet and wash facilities properly located?
    - Is potable water available for workers?
    - Are harvest containers available, clean, well located and protected?
    - Is harvest equipment available and in good condition?
    - Is there evidence of unauthorized entry in the crop area and if so, has it been investigated?
    - Is there evidence of domestic or wild animal crop damage?
    - Is there evidence of physical contamination in the crop area?
    - Are fuel and chemicals which might contaminate crop areas isolated?
    - If areas are contaminated are they isolated for “no-harvest”?
    - Are there any other notable sources of biological or physical contamination such as dump sites, manure, burning debris, water that may affect food safety?
    - Is transportation equipment clean and available? The assessment may include other information as determined by the operation.

Field Sanitation Units

- Number and placement of sanitation facilities must comply with all applicable local, state and federal regulations.
- Have a documented emergency clean-up procedure in case contamination occurs.
  - The procedure should include what will be done to contain the spill and to prevent additional contamination, what will be done to clean up the spill and what will be done with contaminated product.

Harvesting Containers Equipment

- Keep harvest containers (picking buckets, baskets, bulk bins, etc.) as clean as practicable
- key areas to consider which are covered in the GAP&GHP audit:
    - Harvest containers used repeatedly during a harvest cleaned on a scheduled basis as outlined in the food safety plan.
    - If harvest containers are stored outside, proactive steps to minimize harboring rodents and other pests.
    - Harvesting containers stored outside cleaned and sanitized before being used to haul fresh produce.
    - Instruct workers to only use harvesting containers for their intended purpose.
    - Final packing containers used in field pack operations protected from sources of contamination.
    - Only new or sanitized containers are used for packing the product.
    - Repair or discard damaged harvesting containers.
    - Harvesting equipment and machinery which comes in contact with the product is in good repair.
    - Light bulbs and glass on harvesting equipment are protected and
        - SOP in place to address glass or plastic breakage on the equipment during harvest.

Transportation of Produce

- Products transported in bulk from the field or from storage for further packing may be contaminated during this time.
- Steps should be taken to reduce the possible contamination by
  - other vehicles on the roads,
  - overhead contamination from overpasses,
  - from birds or other means.
- Examples of good practices,
  - Using tarps, enclosed trailers or other means to cover loads
- Products being moved in enclosed containers (boxes, cartons, etc.)
  - would be considered covered if they are completely enclosed.

Emergency Clean-Up Procedure

- Have a documented emergency clean-up procedure in the event
  - accidental contamination occurs from glass/plastic breakage,
  - chemicals, petroleum,
  - or pesticides contaminating the crop
- Procedure should include
  - What will be done to contain the spill and to prevent additional contamination.
  - As well as what will be done to clean it up and what will be done with contaminated product.

What's in the Checklist?

Part 2 - Field Harvest and Field Packing Activities

Field Sanitation and Hygiene

	Questions	Points	Yes	NO	N/A	Doc
2-1	A documented pre-harvest assessment is made on the crop production areas. Risks and possible sources of crop contamination are noted and assessed.	15				D
2-2	The number, condition, and placement of field sanitation units comply with applicable state and/or federal regulations.	10				
2-3	When question 2-2 is answered "N/A" (sanitation units are not required), a toilet facility is readily available for all workers.	10				
2-4	Field sanitation units are located in a location that minimizes the potential risk for product contamination and are directly accessible for servicing.	10				
2-5	A response plan is in place for the event of a major spill or leak of field sanitation units or toilet facilities.	10				P

Field Harvesting and Transportation

	Questions	Points	Yes	NO	N/A	Doc
2-6	All harvesting containers and bulk hauling vehicles that come in direct contact with product are cleaned and/or sanitized on a scheduled basis and kept as clean as practicable.	10				D
2-7	All hand harvesting equipment and implements (knives, pruners machetes, etc.) are kept as clean as practical and are disinfected on a scheduled basis.	10				D
2-8	Damaged containers are properly repaired or disposed of.	5				
2-9	Harvesting equipment and/or machinery which comes into contact with product is in good repair.	10				
2-10	Light bulbs and glass on harvesting equipment are protected so as not to contaminate produce or fields in the case of breakage.	10				

Questions		Points	Yes	NO	N/A	Doc
2-11	There is a standard operating procedure or instructions on what measures should be taken in the case of glass/plastic breakage and possible contamination during harvesting operations.	5				P
2-12	There is a standard operating procedure or instructions on what measures should be taken in the case of product contamination by chemicals, petroleum, pesticides or other contaminating factors.	5				P
2-13	For mechanically harvested product, measures are taken during harvest to inspect for and remove foreign objects such as glass, metal, rocks, or other dangerous/toxic items.	5				
2-14	Harvesting containers, totes, etc. are not used for carrying or storing non- produce items during the harvest season, and farm workers are instructed in this policy.	5				P
2-15	Water applied to harvested product is microbially safe.	15				R
2-16	Efforts have been made to remove excessive dirt and mud from product and/or containers during harvest.	5				
2-17	Transportation equipment used to move product from field to storage areas or storage areas to processing plant which comes into contact with product is clean and in good repair.	10				
2-18	There is a policy in place and has been implemented that harvested product being moved from field to storage areas or processing plants are covered during transportation.	5				P
2-19	In ranch or field pack operations, only new or sanitized containers are used for packing the product.	10				D
2-20	Packing materials used in ranch or field pack operations are properly stored and protected from contamination.	10				
2-21	Product moving out of the field is uniquely identified to enable traceability in the event of a recall.	10				D

GAP Part – 3
House Packing Facility

Emphasizes water, the packing equipment, general housekeeping, worker health and hygiene containers used for packing and pests management.

- Water Use in Packing Facility
- Treatment of Processing Water
- Sanitation Program/General Housekeeping
- Worker Health and hygiene
- Containers
- Pest Control

House Packing Facility

- Covers packinghouses located on or near crop production areas.
- Not intended for,
  - repack operations or
  - distribution operations which may custom pack product for retail or foodservice customers.
- Audit can only be performed when the packinghouse is actively handling product.
- If the audit covers more than one commodity,
  - not necessary to see every commodity being packed unless there are major differences in the packing process
  - E.g., dry run product vs. product which uses a water flume, etc.

Water Use in Packing Facility

- Meet the requirements of the EPA Drinking Water Standard.
- Includes water used to make ice used in the packinghouse.
- Municipal water supplies are required to meet these requirements.
- Well water and surface water may or may not meet these requirements.
- Documentation verifying the source water meets the EPA Drinking Water Standard requirements.

Treatment of Processing Water

- Consider practices which will ensure and maintain water quality,
  - Monitoring of sanitation chemicals used to prevent cross contamination (i.e. chlorine and pH).
  - Perform periodic water sampling and microbial testing.
  - Change water as necessary to maintain sanitary conditions.
  - Consider developing SOPs (standard operating procedures or sanitary operating plans), including water change schedules.
- For all processes that use water:
  - clean and sanitize water contact surfaces, such as dump tanks, flumes, wash tanks, and hydro coolers, as often as necessary to ensure appropriate water quality.
- Install backflow devices and legal air gaps, as needed,
  - to prevent contamination of clean water with potentially contaminated water (such as between potable water fill lines and dump tank drain lines).
- Routinely inspect and maintain equipment designed to assist in maintaining water quality,
  - chlorine injectors,
  - filtration systems, and
  - backflow devices,

Sanitation Program/General Housekeeping

- Good sanitation practices as a standard operating procedure to maintain control throughout the packing operation.
- Packing areas:
  - Cleaned minimally at the end of each day. As necessary,
  - Clean and sanitize the washing, grading, sorting, and the packing lines to reduce the potential for microbial contamination of fresh produce.
  - Develop and implement a general sanitation schedule which addresses the cleaning and sanitizing of the packinghouse operation including:
    - Food contact surfaces
    - Pipes, ducts, fans, and ceilings which are over product flow zones
    - Catwalks over food contact surfaces

Sanitation Program/General Housekeeping

- Facility must provide records that indicate there is a regular schedule to sanitize the ice production and storage facility and any means of transportation to reduce the microbial population.
  - Augers, conveyors and shovels used to transport the ice from one part of the facility to another.
- Lubricating agents may come into contact with produce, use food grade approved lubricants
- Have a procedure which identifies how product that spilled or comes in contact with the floor is handled.
- Spilled product that comes in contact with the floor can become contaminated and should not be used without considering a corrective action such as washing /sanitizing or disposing of the product.
- Commodity specific guidelines offer recommendations regarding the handling of spilled product and should be incorporated into the operation's food safety program.

Worker Health and hygiene

- The operation shall evaluate and develop a hair/beard net policy which is appropriate for the facility.
- Hair nets and beard nets are worn in order to keep stray hair from entering the food and food containers being packed.
- In addition, wearing of hairnets when the hair is very long reduces the risk of catching hair in machinery.
- The operation shall evaluate and develop a jewelry policy. Jewelry can be both a physical safety and a food safety hazard.
- Jewelry may fall into the food item or the container or may get caught on machinery and injure the worker.
- The operation shall state the hairnet and jewelry policy in the food safety plan even if the policy states that no hairnets or restrictions on jewelry are required.

Containers

- Operations should develop policies and procedures outlining only the use of new or sanitized containers which are clean and in good condition when packing the product.
- Policies and procedures shall require pallets and packing containers are properly stored to reduce the risk of contamination from pests, rodents, dirt, water, etc.
- Operation shall outline a sanitation schedule for reusable plastic containers used to pack product.

Pest Control

- Establish a pest control program to reduce the risk of contamination by rodents and other animals, including pets.
- Include regular and frequent monitoring to accurately assess the program's effectiveness.
- Program can be either performed by an employee trained to perform pest control or a contracted pest control company.
- Maintain a pest control log which records inspection dates, inspection reports, and procedures implemented to eliminate pest infestations. If using a contracted company, they generally supply the records of activity.
- All traps and bait stations will be marked and flagged by numbers or some type of coding system and recorded on a map which shows the location of such bait stations and traps.
- All bait stations containing poison attractants must be located outside the facility. Traps or other non-poison methods should be the only control program located within a structure.

Part 3 - HOUSE PACKING FACILITY

Receiving

	Questions	Points	Yes	NO	N/A	Doc
3-1	Product delivered from the field which is held in a staging area prior to packing or processing is protected from possible contamination.	5				
3-2	Prior to packing, product is properly stored and/or handled in order to reduce possible contamination.	5				

Washing/Packing Line

	Questions	Points	Yes	NO	N/A	Doc
3-3	Source water used in the packing operation is potable.	15				R
3-4	If applicable, the temperature of processing water used in dump tanks, flumes, etc., is monitored and is kept at temperatures appropriate for the commodity.	10				D
3-5	Processing water is sufficiently treated to reduce microbial contamination.	10				D
3-6	Water-contact surfaces, such as dump tanks, flumes, wash tanks and hydro coolers, are cleaned and/or sanitized on a scheduled basis.	10				D
3-7	Water treatment (strength levels and pH) and exposure time is monitored and the facility has demonstrated it is appropriate for the product.	10				D
3-8	Food contact surfaces are in good condition; cleaned and/or sanitized prior to use and cleaning logs are maintained.	15				D
3-9	Product flow zones are protected from sources of contamination.	10				
3-10	The water used for cooling and/or making ice is potable.	15				R
3-11	Any ice used for cooling produce is manufactured, transported and stored under sanitary conditions.	10				R

Packing House Worker Health & Hygiene

	Questions	Points	Yes	NO	N/A	Doc
3-12	Employee facilities (locker rooms, lunch and break areas, etc.) are clean and located away from packing area.	10				
3-13	When there is a written policy regarding the use of hair nets/beard nets in the production area, it is being followed by all employees and visitors.	5				P
3-14	When there is a written policy regarding the wearing of jewelry in the production area, it is being followed by all employees and visitors.	5				P

Packing House General Housekeeping

	Questions	Points	Yes	NO	N/A	Doc
3-15	Only food grade approved and labeled lubricants are used in the packing equipment/machinery.	10				R
3-16	Chemicals not approved for use on product are stored and segregated away from packing area.	10				
3-17	The plant grounds are reasonably free of litter and debris.	5				
3-18	The plant grounds are reasonably free of standing water.	5				
3-19	Outside garbage receptacles/dumpsters are closed or are located away from packing facility entrances and the area around such sites is reasonably clean.	5				
3-20	Packing facilities are enclosed.	5				
3-21	The packing facility interior is clean and maintained in an orderly manner.	5				
3-22	Floor drains appear to be free of obstructions.	5				
3-23	Pipes, ducts, fans and ceilings which are over food handling operations, are clean.	5				
3-24	Glass materials above product flow zones are contained in case of breakage.	10				
3-25	Possible wastewater spillage is prevented from contaminating any food handling area by barriers, drains, or a sufficient distance.	10				
3-26	There is a policy describing procedures which specify handling/disposition of finished product that is opened, spilled, or comes into contact with the floor.	15				P

	Questions	Points	Yes	NO	N/A	Doc
3-27	Only new or sanitized containers are used for packing the product.	10				D
3-28	Pallets and containers are clean and in good condition.	5				
3-29	Packing containers are properly stored and protected from contamination (birds, rodents, and other pests).	10				

Pest Control

	Questions	Points	Yes	NO	N/A	Doc
3-30	Measures are taken to exclude animals or pests from packing and storage facilities.	10				D
3-31	There is an established pest control program for the facility.	10				D
3-32	Service reports for the pest control program are available for review.	5				R
3-33	Interior walls, floors and ceilings are well maintained and are free of major cracks and crevices.	5				

Traceability

	Questions	Points	Yes	NO	N/A	Doc
3-34	Records are kept recording the source of incoming product and the destination of outgoing product which is uniquely identified to enable traceability.	10				D

GAP Part – 4
Storage and Transportation

- Mechanical Equipment
- Ice and Refrigeration
- Transportation and Loading
  - Covers storage and transportation facilities located on or near crop production areas.
  - Includes,
  - storage and transportation areas co-located with a packinghouse or
  - stand alone storage facilities used on or
  - near farms such as potato storage sheds or controlled atmosphere facilities.
- Not intended for
  - repack operations or
  - distribution operations which may custom pack product for retail or foodservice customers.

Mechanical Equipment

- Any equipment used in the storage facility shall be clean and properly maintained to prevent leaking fluids that could potentially contaminate the product.
- Loose or broken parts must be repaired to prevent foreign objects from contaminating the product.
- Any equipment or portions of equipment that directly touches raw product must be maintained so as to not contaminate the product.

Ice and Refrigeration

- Same as packaging facility
- Additionally,
  - Develop and implement a procedure for monitoring climate controlled rooms for temperature and keeping a record of temperatures.
  - Climate control systems must be working and thermometers used in cold storage areas and for determining product temperatures should be regularly checked for accuracy and operators must maintain records to validate this procedure.

Transportation and Loading

- Develop an SOP which outlines the procedures for inspecting transportation conveyances for cleanliness, odors, and debris before the loading with product.
- SOP should also include policies for not loading produce with potentially contaminating products such as raw meat or chemicals and policies to ensure adequate transport temperatures and should develop a written policy for transporters and conveyances to maintain specified transit temperatures.
- Records documenting adherence to the SOPs shall be maintained.

Part 4 - STORAGE AND TRANSPORTATION

Product, Containers & Pallets

	Questions	Points	Yes	NO	N/A	Doc
4-1	The storage facility is cleaned and maintained in an orderly manner.	5				
4-2	Bulk storage facilities are inspected for foreign material prior to use and records are maintained.	5				R
4-3	Storage rooms, buildings, and/or facilities are maintained and sufficiently sealed or isolated and are protected from external contamination.	10				
4-4	Storage grounds are reasonably free of litter and debris.	5				
4-5	Floors in storage areas are reasonably free of standing water.	5				
4-6	Possible wastewater spillage is prevented from contaminating any food handling area by barriers, drains, or sufficient distance.	10				
4-7	There is a policy describing procedures which specify handling/disposition of finished product which is opened, spilled, or comes into contact with the floor.	15				P
4-8	Packing containers are properly stored and sufficiently sealed, to be protected from contamination (birds, rodents, pests, and other contaminants).	10				
4-9	Pallets, pallet boxes, tote bags, and portable bins, etc. are clean, in good condition and do not contribute foreign material to the product.	5				
4-10	Product stored outside in totes, trucks, bins, other containers or on the ground in bulk is covered and protected from contamination.	10				
4-11	Non-food grade substances such as paints, lubricants, pesticides, etc., are not stored in close proximity to the product.	10				
4-12	Mechanical equipment used during the storage process is clean and maintained to prevent contamination of the product.	5				D

Pest Control

	Questions	Points	Yes	NO	N/A	Doc
4-13	Measures are taken to exclude animals or pests from storage facilities.	10				D
4-14	There is an established pest control program for the facility.	10				D
4-15	Service reports for the pest control program are available for review.	5				R
4-16	Interior walls, floors, and ceilings are well-maintained and are free of major cracks and crevices.	5				

Ice & Refrigeration

	Questions	Points	Yes	NO	N/A	Doc
4-17	The water used for cooling and/or making ice is potable.	15				R
4-18	Manufacturing, storage, and transportation facilities used in making and delivering ice used for cooling the product have been sanitized.	10				R
4-19	Climate-controlled rooms are monitored for temperature and logs are maintained.	5				D
4-20	Thermometer(s) are checked for accuracy and records are available for review.	5				D
4-21	Refrigeration system condensation does not come in contact with produce.	10				
4-22	Refrigeration equipment (condensers, fans, etc.) is cleaned on a scheduled basis.	10				D
4-23	Iced product does not drip on pallets of produce stored below.	10				

Transportation

	Questions	Points	Yes	NO	N/A	Doc
4-24	Prior to the loading process, conveyances are required to be clean, in good physical condition, free from disagreeable odors, and from obvious dirt/debris.	10				P
4-25	Produce items are not loaded with potentially contaminating products.	10				P
4-26	Company has a written policy for transporters and conveyances to maintain a specified temperature(s) during transit.	10				P
4-27	Conveyances are loaded to minimize damage to product.	5				P

Worker Health and Personal Hygiene

	Questions	Points	Yes	NO	N/A	Doc
4-28	Employee facilities (locker rooms, lunch and break areas, etc.) are clean and located away from storage, shipping, and receiving areas.	10				
4-29	When there is a written policy regarding the use of hair/beard nets in the storage and transportation areas, it is being followed by all affected employees and visitors.	5				P
4-30	When there is a written policy restricting the wearing of jewelry in the storage and transportation areas, it is being followed by all affected employees and visitors.	5				P

Traceability

	Questions	Points	Yes	NO	N/A	Doc
4-31	Records are kept regarding the source of incoming product and the destination of outgoing product which is uniquely identified to enable traceability.	10				D

REFERENCES:

- USDA-GAPs Program User's Guide
- Produce Safety Alliance
- GAPs for Small and Diversified Farms, U.S. Dept. of Agriculture and the North Carolina Dept. of Agriculture and Consumer Services