UNIVERSITY OF MINNESOTA EXTENSION

FSP4U

A Food Safety Plan for You

Templates and Log Sheets

Compiled by Annalisa Hultberg, M.S., University of Minnesota Extension

On-Farm GAPs Education Program

Adapted from original template by:

Michele Schermann, R.N. M.S.

Department of Horticultural Science University of Minnesota

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(Download this document to your computer to use it for creating your own farm food safety plan. Go to the File menu and select Download.)

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Disclaimer

Information in this workbook and all templates are presented for planning purposes only**.** By following these guidelines and using the templates, you are not automatically in compliance with GAP practices. The goal of these materials is to provide a general template for starting to develop a food safety plan. The materials included here are not comprehensive but are provided here as the basic beginnings of your Standard Operating Procedures and Log Sheets for your food safety plan. Aspects of individual operations may not be covered in this plan.

Questions, suggestions, or comments can be directed to Annalisa Hultberg, University of Minnesota Extension Educator, Food Safety, or email hultb006@umn.edu.

About this Food Safety Plan template

Food safety is taking center stage in the United States. Vendors and consumers are demanding that measures be implemented to ensure the safety of the fruits and vegetables they buy, sell, and eat. The Food Safety Modernization Act (FSMA) Produce Safety Rule requires many more farms to learn about and develop their farm's food safety systems. While a documented food safety plan is **not** required by the FSMA Produce Safety Rule, it is strongly encouraged and will help organize and prepare growers for an inspection or GAP audit.

This workbook and template will help you document your food safety plan using the Good Agricultural Practices (GAPs)/Good Handling Practices (GHPs) established by the USDA to reduce the risk of microbial contamination and prepare for a FSMA PSR inspection.

What is a Food Safety Plan?

A **food safety plan** is your farm's guide to minimizing the potential for contamination of your produce. It is your farm's policies and practices to keep the produce safe for your consumers. YOU set the policies and practices within it. This workbook will help you create the plan, follow the policies, and record your actions. Use this template to help you create your own farm's food safety plan, so you don't have to start from scratch.

The Produce Third-Party GAP Audit

Some buyers, like supermarkets and produce distributors, require that their suppliers complete an annual third-party audit of their produce. **The USDA Good Agricultural Practices / Good Handling Practices Audit Program (GAP/GHP)** was established to provide unbiased third-party audits of handling practices for fresh fruits and vegetables. Audits require that "A documented food safety program that incorporates GAP and/or GHP has been implemented." **Therefore, this workbook is designed to help you accomplish pass a GAP audit if desired.** You can download the audit checklists.

However, a food safety plan is useful for ALL farms, not just those seeking a GAP audit.

An audit consists of the following sections:

Part 1. General Farm Review (required for all audits)
Part 2. Field Harvest and Packing Activities
Part 3. House Packing Facility
Part 4. Storage and Transportation
Part 5. Traceability (*no longer its own part, has been incorporated into the other parts*)
Part 6. Wholesale Distribution Center/Terminal Warehouses
Part 6A. Traceback (wholesale)
Part 7. Food Defense

You can be audited for all parts or just the parts that relate to your operation. A passing score of 80% is required on each part to pass.

For more information about audits or to schedule an audit, please contact the Fruit and Vegetable Unit at the Minnesota Department of Agriculture at 651-201-6067.

Recordkeeping

Keeping records of all farm operations is very important, especially when it comes to food safety. Even if you aren't going to have an audit, keeping records and log sheets helps with your business plan.

Examples of records that are useful to keep include:

- Water test results
- Employee training programs
- Employee injury and illness
- Equipment cleaning and maintenance
- Manure and/or compost use

Keeping records is a good business practice and may prove that contamination did not originate on your farm in the event of a foodborne illness outbreak. Record keeping is also a valuable business tool and can help you with inventory control and planning, budgeting, insurance and loan paperwork**.**

Log sheets are used to document and verify your standard operating procedures. They may be as simple as recording toilet and hand-washing facility cleaning, or more complicated, such as monitoring and recording worker health status.

If your actions are not documented, there is no way to verify they were done. Examples of recordkeeping logs are placed throughout this workbook for you to use and adapt to your needs. See **Appendix A** for a complete list of log sheets you may need for your food safety plan.

Additional resources

The USDA Checklists used during an audit are included at the end of this workbook. Although background data and examples have been specifically targeted to address the needs of Minnesota fruit and vegetable producers who primarily direct-market their produce, the recommendations contained in this manual may apply elsewhere.

Getting organized

Having a food safety program is good for your business. It helps you make sure all your employees or family members know how the business runs. People can't remember every policy and procedure, and having it written down makes sure that the work gets done correctly and no one must remember everything because it's written down and nearby.

Some people want a documented food safety program because they have a wholesale customer who wants them to get a food safety audit.

Whether you need an audit or not, the first step in a food safety program is to document your policies (rules), procedures and begin to keep records.

Get a 3-ring binder (or binders) for your documents and paperwork. Or if you don't like binders, use a system that works for you that helps you keep your paperwork organized.

When you have assembled your documentation into a complete Food Safety Plan, you will have these pieces:

- Mission statement
- Farm description
- Maps
- Standard Operating Procedures
- Policies
- Records

The MDA auditors in Minnesota have suggested that having your paperwork in the same order as the audit checklist saves time, which will save you money. This template is written approximately in the same order as the USDA GAPs checklist. Keep in mind that the order of the checklist changes occasionally and it's all right if you want to organize your document differently. Do what is easiest for you.

Documents to gather

If you are making this plan because you will need a USDA GAP audit please refer to the USDA GAP checklist at the end of this document in the resource section and available for download on the USDA website.

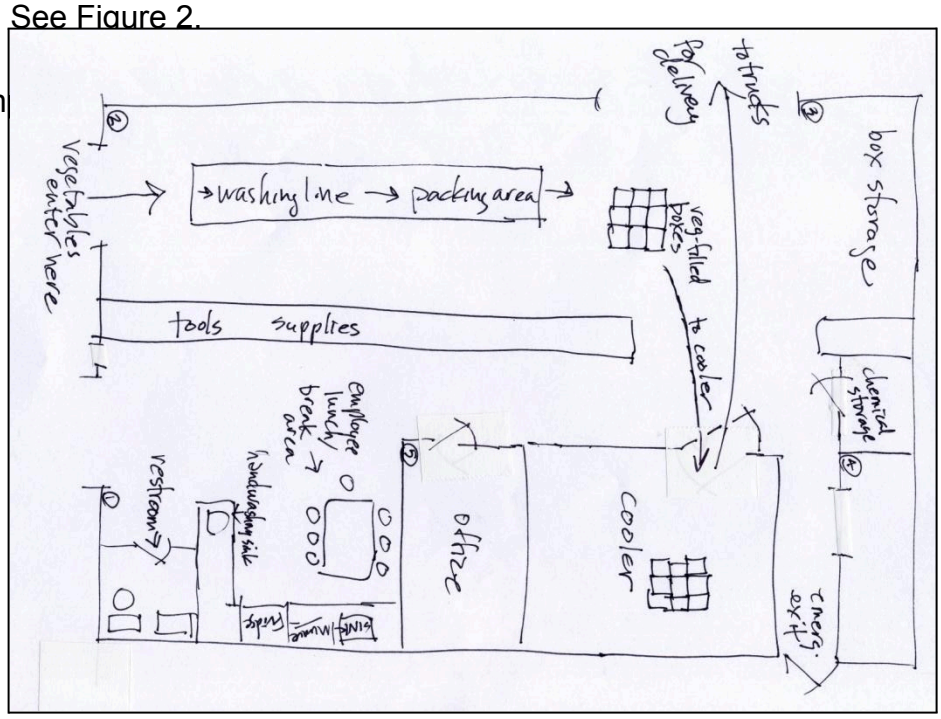
Get started by gathering the following documents:

1. Farm maps. Make a map of the property showing all buildings, fields, roads, and water features (e.g. irrigation heads, streams, ponds). You can look on Google Maps to find an aerial view of the property and make notes on a printed copy or draw your own.
    - Attach a map of your field growing history. Keep your growing records for at least two seasons. Label each field or section with a name or number and write down the produce grown in each area. Write down the acreage. Remember: The maps don't have to be fancy.

Figure 1. Property map. Google satellite view with building and field labels added.

2. Building maps.
    a. Label each building and mark what is in it, such as power/water connections, chemical storage areas, lunch areas, restrooms/sinks, etc. Like the maps, you don't have to be an artist or graphic designer to make floor plans.
    b. Draw a packing line/washing area flow diagram on the relevant map. Show where you box/bag produce from, where field harvest bins/trailers come in and where the finished product goes out before it leaves the farm. Include all coolers, storage areas, and break/rest areas. See Figure 2.

Figure 2. Sim



3. Training certificates for person(s) in charge of food safety and any employees who apply pesticides.

4. Emergency contact information sheet for key people such as the farm owner, farm manager, supervisors, attorney, insurance agent, etc.

5. Farm log sheets: Any records you are already keeping such as pest control records, worker health and safety documentation and training records, etc. If you don't have them, make a list of the records you will need to gather and use and adapt the template log sheets included here.

6. List of your water sources and practices and any water test results.

Now you are ready to go!

The rest of this document is a template for you to use to create your own farm food safety plan. To use this template, put YOUR information where the words are red.

Change the red to black.

Instruction Boxes: As you go through the template, delete boxes—like this one—which include instructions and background.

Make a cover page in the pocket cover of your binder or make it your first page.

Standard Operating Procedures 2025

If you have a logo, put somewhere on the cover page.

Owner name(s)	Name, phone number
Farm manager	Name, phone number
Food Safety manager	Name, phone number

Name of your farm

Address

City, State, Zip

Phone number(s)

Website

Farm name mission statement

If you didn't write one or don't have one, delete this section.

Farm location and land management

Instructions: Write your farm description. Use the **sample** text (below) to help you get started. If you use this sample text, fill in the sections between the red brackets and change the type color to black. Delete all boxes when you are finished.

[Name of farm] is a [state type of] business operated by [Names and roles. Include contact person and person responsible for food safety plan, and phone numbers and email addresses]. The farm is located [main address, audit site, county, legal description/GPS/lat & long; location of other farms in addition to the main site]. Our [total] acre farm includes [crops grown, # trees, etc.]. Our farm also has [for example, five acres in high tunnels for heirloom tomatoes and cucumbers and greens, and ten acres each for pumpkins and strawberries]. In addition to work done by family members, [we employ how many workers, including seasonal], with peak employment [during which months or harvests]. The farm buildings include [give examples] our home (with an office) and seven outbuildings: one small retail market building, two sheds for machinery and tools, one packing building, a chemical storage building, and two other buildings used for short-term storage of harvested produce and supplies.

Instructions: Attach maps after your farm description. Include maps of the farm, the packing house maps showing flow of product, and floor plan of other areas, including storage areas, employee break areas, and restrooms. Include location of mouse/rodent traps on building floor plans.

General Section

Traceability procedures

Background: Traceability means keeping track of what produce went where on what day. A traceability system can be developed from a system you already have in place. Traceability can be high-tech with bar codes and computers, but it does not need to be. The important part is to know what product went where on what day.

Key information contained in traceability procedures:

- **Names of workers who harvest and/or pack produce**
- **Field name**
- **Date of harvest**
- **Date of sale**
- **Where produce was sold**

Document the above information on your **Harvest/Traceability Log.** Use the map you created of your farm to reference field numbers.

Our farm uses a traceability system that allows us to trace produce one step back (field) and one step forward (customer).

[DESCRIBE YOUR SYSTEM HERE, what you really do, example follows]
When selling cases to a buyer we attach a sticker on each box. Each box of produce packed has a sticker that identifies:

- Farm name
- Who packed the produce (name, crew number, or group)
- The field it came from
- The date it was harvested
- The date it was packed
- ID Code or **traceability code** or name of product in the box [show an example of the code you use]
- The date of shipment

Mock recall

To test our recall plan, we conduct a mock recall once a year, usually in [say which month]. In the mock recall, we contact one of our buyers and ask them to identify a shipment received from us. We ask how much of the product has been sold and how much they still have in inventory. This information is recorded on our **Mock Recall Log** and kept on file.

Health and hygiene policies

Training

All employees receive training when they start work on the farm and a refresher course at least once a year. Employees include those that work on the farm that plant, care for, harvest, scout pests, process, and pack fresh produce. Family workers are required to have the training too.

Training includes instruction on all company policies related to worker health and hygiene and (where appropriate) specialized training related to specific jobs as required by law (for example, pesticide applicator license or training).

Employee training is documented on the **Employee Training Log**. Documentation of training includes employee's printed name and signature, description of training, written materials or video, date, and name of person doing the training.

Training is provided in the language of the employees.

Advice from a grower: You may already have an employee manual for your farm, or do Worker Protection Standard (WPS) trainings. Some training may overlap and you

Instructions: Develop a short company visitor policy. Post your farm rules and visitor policy at the entrance to the field so customers are aware of your expectations.
For Pick-Your-Own operations, or CSA farms with member-visitors, you may want your policy to include location of toilet and hand washing facilities, whether or not you allow personal containers in the field, safety of children, a no-glass policy, and a pet policy.

Visitor health and hygiene policy

G-5 Visitors are defined as [for example, anyone other than employees on the farm for more than 15 minutes, anyone who goes in plant production or packing areas].

Visitors will be told where the handwashing and toilet facilities are. Visitors are not allowed to pick produce or handle product without the permission of [the farm manager, owner]. All visitors will sign in when arriving and sign out before leaving.

Handwashing and toilet facilities

Clean and well-maintained toilet and handwashing facilities are provided for all employees, visitors and customers. All toilet/restroom facilities are properly supplied with single-use towels. These facilities are checked on a monthly basis. Restroom facilities are serviced and cleaned [write down how often—daily, weekly, on Tuesdays and Fridays, every other Wednesday.] Monitoring, restocking, and cleaning are documented on the **Restroom Cleaning Logs** and are located [say where you keep the log sheets].

Handwashing

Everyone must wash their hands before beginning work and returning to work after taking breaks, going to the restroom, eating, smoking, or whenever their hands are dirty. Signs in English and [list native languages of the employees and have signs in those languages] are posted in restrooms, eating areas, and smoking areas to instruct employees to wash their hands before beginning and returning to work.

Advice from a grower: You don't need a fancy purchased sign. Find a hand-washing picture on Google images, then use Google Translate to write the text in almost any language you need. Put them together on a piece of paper and you have a sign.

Sample handwashing reminder in English: Everyone must wash their hands before starting work or when returning to work after breaks; and after going to the toilet, eating, or smoking; or anytime when your hands are dirty.

Toilets

Currently, the ratio of employees to toilets is [how many employees: how many available toilets]. The field toilets are located [write down in words where they are and mark them on your maps] away from the growing fields to avoid contamination by fecal material. Flush toilets and sinks located on the farm are on a [state type of sewage system such a private septic system or municipal sewage line] and are located [say where they are].

Instructions: If you have a lot of farm employees and must meet OSHA requirements, be sure you have the correct number of toilets to meet the federal requirements (currently 20 employees to 1 toilet).
Indoor toilets can be used in small operations if they are within a 1/4-mile walking distance from fields or if transportation is readily provided. Restrooms in gas stations or convenience stores can't be used as your restroom.

Injury and Illness Policies

Injuries

If someone is injured at the farm, either in the packinghouse or in the field, the first aid kits are available for use in/at [write down the locations of the first aid kits]. The supplies are checked and updated [YOU decide and stick to it, e.g. MONTHLY, WEEKLY]. History of refilling first aid kits are kept in the **First Aid Kit log.**

All workers are instructed during training to deal with injuries immediately. This includes any cuts, abrasions, or other injury that happens while working. Employees must notify the farm manager or their supervisor and fill out an accident report. If the injury is critical or life threatening, employees are instructed to call 911 for proper care.

Blood and body fluid

If blood or other bodily fluid should come in contact with produce or in the field, immediate action must be taken.

If a person is not able to immediately deal with the contamination due to injury, that person must mark the area if able and immediately notify the farm manager or his/her supervisor who will take appropriate action.

If an employee is injured in the field or packinghouse, the farm manager or supervisor--after assuring the employee's safety--will immediately inspect the area where the injury happened to make sure 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 [say where] as well as any packing materials.

All actions will be documented on the **Illness and Injury Form.**

Illness

Any employee who is sick should notify the farm manager or his/her supervisor immediately and must not handle fresh produce. If an employee does not report his or her illness and is found to be sick by the farm manager or supervisor, the employee will be immediately dismissed from work and not allowed to return until they are symptom free.

1) The following symptoms prohibit an employee from working and handling fresh produce.
    - Diarrhea
    - Fever
    - Vomiting
    - Jaundice (when the whites of the eyes are yellowish and the skin has a yellowish tinge)
    - Sore throat with fever
    - Lesions containing pus (including boils or infected wounds, however small) on the hand, wrist, or any exposed body part

2) If an employee has any of the conditions listed above, these conditions will be recorded on the **Illness and Injury Form.**

Drinking water policy

Potable drinking water is provided and available for employees 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 is allowed.

Safety during application of chemicals

Only licensed individuals may apply regulated substances including plant protective sprays. Non-regulated chemicals may only be applied by trained individuals. [List trained people, license numbers, and expiration dates here OR list company that does contract spraying. Attach copy of up-to-date licenses to your SOP.]

Employee Food Safety and Security Empowerment

All employees are instructed to share information they observe regarding food safety and security. If employees see unusual individuals or situations, they should notify their supervisors so they can evaluate the situation. If employees notice pests or other food safety issues, they are encouraged to share this information with their supervisors. Our company's food safety policy includes all employees and is companywide.

Clothing, jewelry, and cell phone policy

Employees will wear clean clothing to work every day.

No jewelry is permitted in the field, around machinery, in the packinghouse, or in the packing facility, with the exception of a plain wedding band (no stones allowed), and wrist watches.

Cell phones should not be used during washing, harvesting and packing produce since they can cause cross-contamination. Cell phones will be stored in lockers or in a belt holster or pants pocket.

Instructions: You decide your jewelry and cell phone policies. Whatever you decide, people have to follow that policy. Some growers prohibit jewelry worn above the waist (no earrings, watches, or necklaces). Make the policy fit your operation and make sense to you and your employees. Remember to stick to your policy.

Policy on taking breaks

Breaks that include eating or smoking must be taken in areas away from fresh produce production and packing. In the packinghouse, there are designated break areas, which are [write it down in words and mark the areas on the building and field maps].

All personal items must be stored in designated areas [specify in detail] in the field, break room, and packinghouse. Under no circumstances will glass containers be allowed in the field or packinghouse.

Important: DO NOT say "Breaks are taken in the designated area."
Wherever you decide people will take breaks, specify it in words in your policy and make sure that's where employees take their breaks. It just must be out of the field or packing area near the food. You do not have to build a new building for breaks.

Congratulations! You have completed the General Section of the Template.
Remember to change all the red sections where you supplied information to black.
Remember to **delete** all the boxes, like this one.

Part 1. Farm Review

Water quality assessment

Our water comes from [say where, pond, stream, well, municipal]. Our crops are irrigated by [say what kind type of irrigation method you use, such as overhead, drip, microjet].

We test water used for irrigation, rinsing produce, and mixing of topical sprays [how many] times per year for generic *E. coli,* and these records are kept on file [say where]. If any water test is outside our normal range, we do an observational review of the water source area to see if there are any obvious problems or situations that can be mitigated. We then take recommended actions to reduce contamination and retest water as needed. All observational reviews are documented, and any mitigation actions are documented in our **Water Source Testing Log.**

See **Appendix C** for more information on frequency of testing, what to tests to get, and how to take a water sample.

Animals/wildlife/livestock and manure lagoons

Instructions: This part can get a bit tricky for some people. The goal is to document what you are doing to keep animals and fresh manure out of your fields. Animals can spread disease that can make people sick. It is important to make your best effort to keep animals out of your fields, but you are not required to erect large fences or take other drastic measures. Just do your best to ensure there are not LARGE numbers of animals or birds in your field and document these efforts.

[Option A:] We do not have livestock or manure lagoons. Our production areas are not located near or adjacent to dairy, livestock, or fowl production facilities or manure lagoons.

[Option B:] A [dairy/livestock/ fowl production facility/manure lagoon] is adjacent to [say which field and have it marked on your farm map]. There is a [natural or physical] barrier between the [manure pond/facility], which can be observed. This barrier is a [road, highway, hill, row of trees, grass strip xx yards wide, hay field or whatever it is].

Remember: This doesn't mean you can't have a cow pasture. A feedlot with manure and bare dirt with potential for runoff is not allowed directly adjacent to your production fields. But you can have pastures near to production fields as long as you say how you will reduce runoff, like you have filter strips or buffer areas to separate livestock areas from production areas in case there is a washout from rain or flood. Look at your land and drainage patterns and adjust cropping strategies accordingly so that there is not direct runoff into your fields.

A common manure issue in Minnesota is turkey manure. Turkey manure is often stored on the headlands before next year's use. If it's stored on the headland of your field it needs to be trenched and covered. An auditor will look at the land to see if there is vegetation, a ditch, or trees between your field and the manure.

Fence and field inspections

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

[Write how often] we do a field perimeter check to look for animal tracks and pathways, animal resting areas, or other signs of animals in the fields. We record what we see on our inspection on the **Fence Perimeter and Field Inspection Log**, and any actions taken.

Inspecting the fences and fields will include the following:

- Walking the fence line observing any places where the fence may be compromised or in need of repair. All repairs are noted in the **Fence Perimeter and Field Inspection Log**.
- Making sure there are no weaknesses or places where animals are clearly entering and exiting the fields.
- Visually inspecting the fields from the outside to see if there are any noticeable signs of animal presence. If animal presence is noted, affected sections of the field will be noted and not be harvested.

This is an example. Write down what will be done during your inspections. If you don't have a fence, don't talk about fence inspections; delete that part.

Employees are instructed to notify the farm manager if during their normal farming activities they notice signs of animals passing through or feeding in the production areas. These activities are noted in the **Fence Perimeter and Field Inspection Log.**

If you don't have a fence, change the name of the log to **Field Inspection Log**.

Wildlife

Our primary wildlife problem comes from [name which animals, and if they vary by time of year note that as well]. Wildlife activity is monitored and deterred through [state methods used to exclude wildlife from fields or deter their presence, for example: “Geese are deterred from ponds using swan decoys and water cannons. To reduce nesting, we mow down tall grass around ponds.” “We use soybean planting barriers between deer habitat and the production field.” “We plant leeks, garlic, and other plants that deer don’t like between the outside area and the production area.” “We use sound machines and VCR tape strung between posts to shake in the wind to scare deer.”]

If animal feces or remains are found in production areas, we mark a 5-foot area* around the feces or remains and harvest outside of the perimeter. If there is a significant amount of feces, we remove the feces with a shovel and bucket and wash our hands before continuing to harvest.

Note: *The area will vary by crop. You will need to remove large amounts of feces so it does not contaminate your crops. Remember to use common sense. Deer manure in the apple orchard is a lower risk than cow manure in the lettuce patch.

Manure use

Option A: Uncomposted raw manure is applied AT LEAST 120 days before harvest for crops that are in contact with the soil, and 90 days if the crops are off the soil. Applications are documented in the **Manure Application Log**. All manure is stored away from crop production areas [say where, mark the location on your maps].

Important: If you are getting a USDA GAP audit, the auditor is auditing your farm for the current growing year. Fall apply of manure is not a problem because you did it last year.

Sometimes we used passively aged/stacked manure and apply it in the fall after harvest [or whenever you do and say on which fields]. We always apply passively aged/stacked manure that is not fully treated in the fall, or not within 90 or 120 days before harvest of the produce.

Option B: Fully treated or properly composted manure is used. We purchase treated or composted poultry manure or other treated manures from [write down the name of the company you get it from]. We keep the manure test results, certificates of their process, and documentation of analysis reports. (You do not need to wait between application and harvest for properly treated manure.)

Fully composted manure means you follow EPA/FDA guidelines and records have been kept to document temping and turning. Or it is a purchased composted manure or pelletized product.

Compost piles are covered to reduce the chance of runoff, leaching, wind spread, or recontamination.

Option C: We do not use any animal manure or municipal biosolids on our farm.

Instructions: Write a statement of previous land use history here and a risk assessment. Write a general description of the farm and adjacent land. Write down what is on adjacent land and say if it's a risk or not.

Soil assessment

Our crop production land has been farmland for [# of years]. There are no concerns about previous land use related to microbial contamination of crops. There [are / are not] [any / how many] feedlots, municipal water treatment facilities, adjacent to our property representing [no risk, or list the risks]. Cropland is not susceptible to flooding. [If there are concerns about previous land use or land is susceptible to flooding, put it here].

The history of this farm as a [type of farm] necessitated the following preventative measures [list them; basically, that if you are farming on land that was a chemical dump, former meth labs, or other hazardous site, that you have identified the area and what you did about it – fenced it off, don't grow over it].

Field traceability

Production areas are identified by [NAME or CODE]. See the farm map.

Congratulations! You have completed Part 1: Farm Review section of the Template.
Remember to change all the red sections where you supplied information to black.
Remember to **delete** all the boxes, like this one.

Part 2. Field Harvest and Field Packing Activities

Pre-harvest risk assessment statement

We have conducted a pre-harvest risk assessment of our fields. We have checked the fields and [have or have not] noticed signs of dumping, flooding, garbage, unusual or excessive human or animal presence. [If you noticed something, write it out in detail what you did about it].

Field sanitation and hygiene

> As stated in the General section, if you have many farm employees and must meet OSHA requirements, be sure you have the correct number of toilets to meet the federal requirements. Indoor toilets can be used in small operations if within ¼ mile walking distance from fields or if transportation is readily provided.

Currently, the ratio of workers to toilets is [how many workers: how many available toilets]. Field toilets are located [write down in words where they are and mark them on your maps] away from the growing fields to avoid contamination by fecal material and are directly accessible for serving.

Flush toilets and sinks located on the farm are on a [state type of sewage system such a private septic system or municipal sewage line], and located [how far away, and is transportation provided if more than 1/4 mile. Remember, gas station or convenience store restrooms don't count as your employee restroom].

Field sanitation units are cleaned regularly and serviced by [state self or name of company]. All cleaning and servicing records are kept in the **Field Sanitation Unit Service Log.**

> Cleaning and servicing of the unit can be contracted with a sanitation unit rental company. If so, they will provide documentation of cleaning and the schedule.

Policy and procedure for handling a septic or sanitation hazard in the field

Sanitation facilities that have been tipped over or are in any way not available for use will be noted immediately and dealt with in a manner that minimizes the risk of contaminating the produce. In the case of a sanitation unit spilling or any other septic leakage occurring in or near field boundaries, the following clean-up steps will be performed:

1. Any affected produce is immediately disposed of in a covered waste bin.
2. The contaminated area will be marked off with caution tape or string.
3. Signs in appropriate languages will be posted at the perimeter prohibiting entry to the contaminated area.
4. People and animals will be kept out until the area is sufficiently decontaminated.
5. Any solid waste still resting on the surface will be collected, shoveled up, and removed to the waste bin.
6. Any affected permanent structures will be hosed off and disinfected with a dilute bleach solution.
7. The sanitation unit will be cleaned up and replaced by the company providing the units and maintenance services.
8. The spillage event and corrective actions will be written down in the **Field Sanitation Unit Service Log** and kept in your records.

Field harvesting and transportation

All objects that come into contact with produce must be clean, in good working condition, and cleaned and/or sanitized on a scheduled basis. This includes, for example, hands, harvesting equipment (knives, pruners, etc.), harvesting [containers, totes, boxes, bins] transportation equipment, bulk hauling vehicles, processing equipment (tables, cooling tubs), and storage equipment.

Water

Water used during harvest is microbially safe and has been tested to show that it contains no detectable generic *E. coli* per 100/ml sample. Water test results are kept [say where].

Harvesting tools

Any tool used for harvesting produce, such as a knife or scissors, will be cleaned and sanitized daily when in use. If this is not done, that tool may not be used for harvesting. Cleaning history is kept on file in the **Harvest Tool and Container Cleaning Log**.

Harvesting totes/containers

The harvest containers are kept in good repair and damaged ones are immediately discarded or repaired. Harvesting [write your container type] will be cleaned and sanitized before each harvest season and [write how often during the season]. Each [write your container type] is numbered and individually identified and its cleaning history is kept on file in the **Container Cleaning Log.**

[Write your container type] not in use will be stored in a clean and secure location [say where that is exactly].

Vehicles in the production areas

Vehicles are allowed only on the roadways and headlands. All vehicles will be inspected for the following prior to entering the fields:

- interior and exterior cleanliness
- no broken or cracked plastic or glass windows, fixtures, covers, or other parts.
- no dripping oil, anti-freeze, or other fluid, petroleum product, or automotive lubricant
- If you are going to be moving produce with a passenger vehicle, there must be no contamination hazards present including food, pet hair, or other items that could compromise the produce. Inspect vehicle before loading produce.

Vehicle inspection and cleaning records will be kept on the **Vehicle Cleaning and Inspection Log.**

Harvesting machinery

Harvesting machinery and equipment is inspected before harvest and is in good repair. Mechanical harvesting equipment is inspected [between loads] during harvest as well and any foreign objects such as rocks, glass, metal, or other items are removed. Light bulbs on harvesting equipment are shatterproof or are shielded with shatterproof sleeves or covers.

Broken glass policy

If broken glass or plastic is found, or is glass is broken on machinery during harvest, the machinery is stopped, and the area inspected and all shards are picked up, placed in a [cardboard box, sealed, and placed in a secure trash can/ plastic bucket with a secure lid etc]. The area is further inspected, and the machinery is checked for any other shards and they are disposed of as well. Depending on the source of breakage, size of breakage, the area may be marked off-limits for harvest with tape in a circumference of [number] feet around the original breakage.

Gas and petroleum spills or leaks policy

Petroleum products of any kind may not be stored or used within the perimeter of the farm fields unless there is a specific permanent structure built there for storing such fluids. If no such building exists, petroleum products must be kept in the machine shed. All refueling must take place away from produce fields to minimize the risk of petroleum contamination to the fields or produce.

If gas or oil is spilled in the field, immediate attention will be taken to stop the spill by turning off valves or plugging the source of the leak. If the source is a tank or any other kind of container and it is punctured, a wooden plug or a bolt will be used to prevent further leaking.

After stopping the spill, the contaminated soil will be removed from the ground and contained in a bucket, pail, or other non-permeable container. All soil that has visible oil stains or petroleum odor will be dug out and contained. The contaminated soil will be treated [say how].

Detailed instructions on treating contaminated soil can be found in the appendix section and at the MN Pollution Control website.

After the cleaning process is finished, the employee must submit a report of the incident describing what was spilled and the amount, how the spill was cleaned, and the steps that will be taken to prevent future spills. Illustrations or diagrams should be included to show the contaminated area, the excavation of the soil, and the kind of waste that was created.

Harvest container use policy

Harvesting [write what you use, e.g. containers, totes, boxes, bins] will not be used for carrying anything but produce. If something other than produce is placed in a harvesting tote, that tote must be cleaned and sanitized.

Before moving produce from the field, excessive dirt and mud will be removed from [write your container name] and pallets as much as possible.

The farm carts used to move produce from the field to the packing house [if you use a bean wagon, change “farm cart” to “bean wagon.” Use your own terms] are clean and in good repair. The farm cart used for carrying cases of produce out of the field will be cleaned [weekly, daily, monthly, or whatever you set up as your schedule] or more often as needed. This cleaning and inspection will be recorded in a **Farm Cart Maintenance Log.**

It is our **policy** that any product that is being moved from the field to the processing and storage house will be covered.

All containers used for field packing are new, single use cardboard containers, or cleaned and sanitized plastic containers. A [**Container Cleaning Log**] is [maintained, or kept on file, depending on what you are using]. Cardboard containers are covered and stored [say where you are storing them].

Harvest traceability

All containers of harvested produce leaving the field are labeled with unique identifiers and are logged on our **Harvest/Traceability Log**.

Congratulations! You have completed Part 2: Field Harvest and Field Packing section of the Template. Remember to change all the red sections where you supplied information to black. Remember to **delete** all the boxes, like this one.

Part 3. Packing House Facility

The Packing and Storage House will be accessed by authorized personnel only.

Before being packed, the produce is stored [where] and protected from contamination during the staging period by [write down how product is protected].

Washing/packing line

The water used in the packing, cooling and rinsing of fresh fruits and vegetables meets the microbial standards for drinking water. Municipal water tests are obtained yearly, and farm wells are tested yearly and kept with the **Water Source Testing Log**. We do not use surface water from ponds, lakes, streams, ditches, or canals in the packinghouse. Backflow devices are installed to prevent contamination of clean water. Water test records are [attached or filed where].

> See **Appendix C** for instructions on taking an accurate water sample from your farm's water source.

The temperature of the water in [dump tanks, flumes, wash tanks, sinks, basins etc.] is monitored [automatically or with a standard thermometer]. The water temperature is not significantly cooler than the produce to reduce the potential for infiltration.

> **Instructions:** Use a thermometer to test pulp/core temperatures for accurate temperatures when washing produce in the "dunk tank" fashion. Tomatoes, netted melon, and apples are prone to absorbing water in the stem end or through blemishes when submerged in water that is colder than the pulp temp. Sorting produce before washing is a good idea so you can inspect cuts, blemishes, or signs of wildlife damage that can make your produce more susceptible to water infiltration. See **Appendix D** for instructions on calibrating your thermometer.

Wash water sanitizers

Dump tank water is changed [insert how often here] to maintain sanitary conditions while washing produce. We use a labeled sanitizer in our dump tanks to reduce the potential for cross-contamination when washing some produce [say what the sanitizer product is, say what produce you use it on]. Levels are maintained at [insert levels here, as per the label] and documented on the **Water Sanitizer Log.**

Product flow zones are protected from sources of contamination. [describe how it's protected].

> **Remember:** Assess your risks and work to reduce the risks. If you have a roof with rafters, you will need to keep birds from roosting in the rafters by using nets, predator decoys, or other methods. If flies are an issue, use fans to keep them away. If you pack under a tent or other temporary permanent structure, keep the area clear and control dust and dry dirt from blowing.

Ice management

Ice-making machines are sanitized on a regular schedule [Say what the schedule is] and documented on the **Ice Machine Cleaning Log**. When purchased, the supplier will supply a copy of the sanitization log and water quality tests for ice production. This documentation is kept with our water logs. All ice hauled to a separate location is transported in a closed truck or in covered bins. No ice will be transported in wood containers.

Food grade lubricants

Only food-grade lubricants are used on packing and other equipment that comes in contact with produce. We commonly use [say what you use], and the SDS is kept on file and posted in the packinghouse.

Packing house worker health and hygiene policy

Employees will wear clean clothing to work every day.

When required, employees will wear appropriate clothing supplied by the company, including hats, hairnets, aprons, and disposable gloves.

No jewelry is allowed in the packinghouse or packing facility, with the exception of a plain wedding band (no stones allowed).

> You decide your jewelry policy Whatever you decide, people must follow that policy. Some growers prohibit any jewelry worn above the waist (no earrings, watches, necklaces). Make the policy fit your operation, and make it make sense to you and your employees. Remember to stick to your policy.

Employee areas, including lunch and break areas, are located [say where, note areas on map, can't be in the packing area] and are kept clean. Under no circumstances will glass containers be allowed in the packinghouse. We keep personal items like bags and lunches in cars, in the break room, or in other areas away from the produce packing line.

Packinghouse general housekeeping

The packing and storage facilities are cleaned on a regular basis, including cleaning and sanitizing of food contact surfaces. We have included a SOP on how to properly mix the sanitizer following the label at the end of this food safety plan. We keep this in the packinghouse and in the food safety plan binder for reference.

Sanitizers used on food contact surfaces
We use [state what type of sanitizer you use, like Sanidate 5.0 or chlorine bleach] to sanitize surfaces such as knives, scissors, sorting and packing tables, brush washers and dunk tanks. We follow the label, and the sanitizer is made at 100ppm – 200 ppm concentrations. We test the concentration using tester strips. We apply the sanitizer after cleaning with soap and water and allow it to air dry. We have a complete SOP for making sanitizer at the end of this plan.

Pipes, ducts, fans and ceilings are kept clean. At the end of each day, packing areas are dry swept. The washing, grading, sorting, and packing lines are cleaned and sanitized as well. A thorough cleaning, including floor drains, will happen on a weekly basis or as needed and this will be recorded on the **Packinghouse and Washing Line Cleaning Log.**

Sanitation chemicals have their own storage area separate from the processing line and are marked on the building map.

Areas outside the packinghouse are well-maintained [say how, well-mowed or gravel]. They are free of debris that could harbor pests and free of standing water. Garbage cans/dumpsters are covered and located away from packinghouse entrances.

Glass

No glass containers are allowed in packing house. All light bulbs are shatter proof or are shielded with shatter proof sleeves or covers.

Policy for produce that hits the floor

If produce falls or is dropped to the floor it may not be picked up and put back on the packing line. And dropped produce should remain on the floor. Produce culls will be cleaned from the floor regularly. Produce will be swept or pushed away from the packing line and shoveled into the clearly marked vegetable waste bins. Employees will wash their hands before returning to the packing line. The produce in the waste bin will be emptied at the end of the day, or sooner, and taken to [e.g. the compost pile, disposed of in the dumpster].

Packing containers

All containers used for packing are new or sanitized containers. Records of cleaning are kept on the **Harvest Tool and Container Cleaning Log**. Packing containers are covered and stored [say where you are storing them]. Pallets and containers are kept in good condition, if broken they are disposed.

Rodent and pest control

> Farm buildings, packinghouses, and storage areas are inevitably subject to animal and pest infiltration. You must do your best to keep pest problems under control. If your processing and storage facility has permeability that allows pests in, you must have a plan to deal with the cracks and holes to control the pests.

Traps are placed throughout the operation and their location is identified on a map. Traps are checked daily, and records are kept of the daily checks as well as any pests that are found in the traps on the **Pest Control log**. We NEVER use bait inside the packinghouse.

All walls, doors, and windows are inspected. All windows are screened. Holes are repaired to prevent pest and/or bird entrance into the buildings. Employees are trained to report any signs of infestation in the field or processing and storage areas.

If we hire an exterminator or pest control company, they will monitor the buildings on a [say how often] basis. All traps will be checked and documented [say how often] by the farm manager. A service report from pest control company will be provided or updated [say how often]. If a change in conditions develops, the monitoring company will be contacted immediately.

Part 4. Storage and Transportation

Storage area housekeeping

Storage areas are kept clean and tidy. The general housekeeping policy for the storage area general housekeeping is the same as for the packinghouse areas, as is the pest and rodent control program.

Storage coolers

Storage cooler temperatures will be checked and logged [how many] time(s) per day. Problems will be addressed immediately. Multiple thermometers are used to assure correct temperatures.

Before using coolers for season, we check for holes, cracks, or any other openings that rodents or insects could use to get in the cooler.

The cooler will also be cleaned on a monthly basis or sooner if needed. This cleaning will be recorded in the **Storage Cooler Cleaning Log** and kept on file for one year.

Vehicles for produce transportation to market

All delivery trucks and vehicles used to transport produce to market are inspected for odors and signs of unsanitary conditions before loading. If a vehicle is found to be unsanitary, it will be cleaned and sanitized before produce is loaded. All records of inspections and cleaning will be kept on the **Delivery Vehicle Cleaning and Inspection Log.** All shipments will be documented on the **Transportation Log.**

Equipment used to carry animal products or other potentially hazardous items including carcasses, manure, or pesticides will not be used. Any contracted truck operators will be asked to state the last load that was hauled in the vehicle and provide a cleaning schedule and temperature log for the vehicle before loading, as well as a log of previous loads.

Proper transport temperatures will be maintained and printed on manifests to ensure the quality and safety of the product. Produce will be loaded carefully so that risk of damage will be minimized. Only employees who are trained in loading produce out of the storage cooler and onto trucks will be allowed to do so.

Appendix A

Log sheets

1. Cooler Temperature Log
2. Compost Time/Temp Log
3. Delivery Vehicle Inspection and Cleaning Log
4. Employee Training Log
5. Farm Cart Maintenance Log
6. Fence Perimeter & Field Inspection Log
7. Field Sanitation Unit Service/Cleaning Log
8. First Aid Kit Log
9. Harvest Records/Traceability Log
10. Harvest Tool and Container Cleaning Log
11. Ice Machine Cleaning Log (*adapt the Storage Cooler Cleaning Log*)
12. Illness and Injury Report Form
13. Manure Application Log
14. Mock Recall Log
15. Packinghouse and Washing Line Cleaning Log
16. Pest and Rodent Control Log
17. Restroom Cleaning Log
18. Storage Cooler Cleaning Log
19. Thermometer Calibration Log
20. Transportation Log
21. Water Source Testing Log
22. Water Sanitizer Log

Appendix B

Proper hand washing technique

All employees handling produce for processing or sale will use proper hand-washing techniques before beginning work and after returning to work after taking breaks, going to the restroom, eating, smoking, or any other time their hands are dirty.

Proper hand-washing technique includes the following:

- ✔ Wet hands with clean water (warm is preferred if available), apply **soap**, and work up a lather.
    - Auditor will look for SOAP. Hand sanitizer doesn't count.
- ✔ Rub hands together for at least 20 seconds.
- ✔ Clean under the nails and between the fingers.
- ✔ Rub fingertips of each hand in suds on palm of opposite hand.
- ✔ Rinse under clean, running water.
- ✔ Dry hands with a single-use towel.
    - Auditor will look for single use towels.*

Remember to wash hands after touching any potentially unsanitary surface and after using the toilet; touching your face, hair or body; and before and after eating. When possible, turn off the faucet with the single-use towel instead of directly with your hand when using a sink and faucet that is not automatic or knee operated.

Do NOT use a paper towel more than once or share towels with others.

Note: A video from the National GAPs Program is available in English, Spanish, and Hmong, and should be used as a training resource when first introducing employees to proper safe food handling methods. The video is titled *Fruits, Vegetables, and Food Safety: Health and Hygiene on the Farm.*

*For smaller farms that don't have a separate dedicated restroom for employees and don't want to install a single-use dispenser in their home bathroom, you can put a stack

of small hand towels or clean washcloths in the bathroom for single use. After use, employees will throw them into a waste container or small laundry basket that you have put there for this purpose.

Appendix C

Water testing procedures

All water used on the farm (irrigation water, postharvest washing water, water for handwashing and cleaning, and water used to mix topical, pesticide, or protective sprays) should be tested for the presence of generic *E.coli*. Depending on the source and the use, the frequency of testing will vary.

See the FDA FSMA Produce Safety Rule for more information about allowable amounts for different uses of agricultural water. Postharvest water cannot have any detectable E. coli per 100 ml, and water used for irrigation and pre-harvest uses can have some amounts, under a certain limit. See here for more information:

Frequency

From municipal sources, obtain a copy of test results at least yearly from your county/municipality and keep it in your files. If you use well water, test at least, once per year during the growing season and more often if you are using well water for washing or rinsing produce or using it for spraying. If you are using surface water, test at least 5 times per year during the growing season.

How to take a water sample

Contact your county environmental health department or a reputable lab to test your water. Follow their instructions for taking the sample and submitting the sample.

Appendix D

How to calibrate a thermometer

The melting point of ice method.

1. Place ice in a container and let it melt.

2. Stir to make sure that the temperature in the ice/water mixture is uniform throughout the container.

3. When the ice is partially melted and the container is filled with a 50/50 ice and water solution, insert the thermometer and wait until the needle indicator stabilizes. The thermometer should be 32ºF (0ºC).

4. If the thermometer is not reading 32ºF (0ºC), it should be adjusted by holding the head of the thermometer firmly and using a small wrench to turn the calibration (hex) nut under the head until the indicator reads 32ºF (0ºC).

An important item to remember is to never add tap water to ice because this will not be 32ºF (0ºC) but will be a higher temperature. The calibration will be much more accurate if you use melting ice.

Source: Gravani, R B., Rishoi, D C.,(1998). *Food Store Sanitation* (6th ed). Cornell University Food Industry Management Distance Education Program, Lebhar-Friedman Books, Chain Store Publishing Corp.

Resources

Template updates, log sheets, how-to videos, and resource lists can be found at UMN Extension.

The National GAPs Program Good Agricultural Practices Network for Education and Training

FDA Produce Safety Rule

Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables. US DHHS, FDA, Center for Food Safety and Applied Nutrition

Attached in the following pages:

Log sheets

Cleaning up small petroleum spills—from the Minnesota Pollution Control Agency,

Spill debris disposal options—from the Minnesota Pollution Control Agency,

The USDA Audit checklist—The USDA checklist is the framework for the organization of this template. You can also find the most current version at the **USDA Agricultural Marketing Service website.**