Make a cover for your plan. Add your logo too!

Star Farm Food Safety Plan 2021

Star Farm Chicago

Contact: Farm Manager
Rachel Kimpton
972-400-7834

Rachel Kimpton
AFDO Produce Safety Alliance
FSMA Grower Certification
March 2018

Farm address:
934 W 50th Pl

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

This plan was written in February 2021. **(G-2.1)**

The plan was reviewed annually on [DAY, MONTH, YEAR]. All updates and revisions are included in the back of this document. **(G-2.2)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

DISCLAIMER

This template was designed to help fruit and vegetable growers develop a farm food safety plan. The National GAPs Program personnel are not auditors so cannot provide audit or legal advice. This document does not ensure compliance with audits or the Food Safety Modernization Produce Safety Rule regulations. The National GAPs Program does not guarantee accuracy, adequacy, completeness, or availability of any information provided in this template and is not responsible for any errors, omissions or for any results obtained from the use of such information. In no event shall the National GAPs Program or its personnel be liable for any indirect, special, or consequential damages in connection with any use of this template.

REFERENCES

USDA GHP/GAP version 1.2, September 18, 2014, available at https://www.ams.usda.gov/services/auditing/gap-ghp/audit.

USDA Harmonized GAP version 1.1, January 5, 2018, available at https://www.ams.usda.gov/services/auditing/gap-ghp/harmonized.

Food Safety Modernization Act Produce Safety Rule, November 27, 2015, available at https://www.federalregister.gov/documents/2015/11/27/2015-28159/standards-for-the-growing-harvesting-packing-and-holding-of-produce-for-human-consumption. For more information on meeting these regulatory requirements visit https://producesafetyalliance.cornell.edu/.

ACKNOWLEDGEMENTS

Development of this template has evolved over a decade. The authors would like to acknowledge all the growers who have made suggestions for additions and who have provided years of productive input. We would also like to acknowledge information sharing, improvements, and edits from our Produce Safety Alliance team, Cornell Cooperative Extension, Northeast Organic Farming Association-NY, and USDA colleagues. Lastly, we want to thank our NYS Department of Agriculture and Markets colleagues who attended our GAPs Farm Food Safety Plan Writing Workshops and provide valuable feedback to growers on the farm food safety plans they develop.

IMPORTANT NOTES

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

This is a template to help you develop a farm food safety plan. The information provided will vary in applicability to each produce grower, packer, or handler. It is not possible for the template to address every situation. Please only include practices you can implement and delete any sections that do not apply to your farm or packinghouse.

Areas that appear in **BLUE** are instructions/guidance and are likely not necessary in the final farm food safety plan, but are included for your information. You may delete these areas once you have worked through them. Since many growers use their farm food safety plan to participate in a third-party audit, corresponding numbers have been placed beside most sections for reference. **USDA GHP/GAP** audit numbers are in **RED**. The farm food safety plan includes five of the GHP/GAP audit parts, General Questions (denoted by G), Farm Review (denoted by 1), Field Harvest and Field Packing Activities (denoted by 2), House Packing Facility (denoted by 3), and Storage and Transportation (denoted by 4). **USDA Harmonized** audit numbers are in **GREEN**. The farm food safety plan includes three of the Harmonized audit parts, General Questions (denoted by G), Field Operations and Harvesting (denoted by F), and Post-Harvest Operations (denoted by P). The colors are just to denote differences or specific requirements in audits and may be changed at any time. In addition, requirements of the **Food Safety Modernization Act Produce Safety Rule** are indicated in **BROWN**.

This plan will need to be supported by Standard Operating Procedures (SOPs) and records that document your actions when implementing food safety practices. Many template SOPs and recordkeeping logs are available:

- Through a collaboration with colleagues at University of Minnesota and University of Tennessee, a collection of SOPs and recordkeeping logs were developed.
- The Produce Safety Alliance team developed a fact sheet and records specific to the FSMA Produce Safety Rule.

These are intended to be guides and should be changed to reflect what you do on your farm.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Documents You Should Have Handy

1. Farm map. Know total acreage farmed and commodities produced. Can use Google Earth to help develop map.
2. Map of farm irrigation system.
3. Organic farm production plan (if applicable).
4. Packing/washing line or area diagram. This includes where you box/bag produce; should start where field harvest bins come in and end where the finished product goes out before it leaves the farm.
5. Packinghouse flow diagram (if applicable). This includes all coolers, storage areas, cull areas, break areas, etc.
6. All training certificates for contact person in charge of food safety as well as all persons involved in the application of pesticides.
7. Emergency contact information for priority contacts. This includes farm owner, farm manager, supervisors, attorney, etc.
8. Farm food safety plan and all recordkeeping sheets. Specifically, water testing results, rodent monitoring logs, employee training log sheet, and training materials.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

TABLE OF CONTENTS

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Farm Description

Star Farm Chicago is an urban farm and landscaping company established in 2016 in the Back of the Yards neighborhood. We work to increase access to local, sustainably grown produce through farmers markets; a year-round, aggregated CSA delivery service, featuring products from other local growers and producers; and a forthcoming local foods co-op, shared community kitchen, and aggregation space for local growers. On the farm, we create an inclusive space by providing local jobs, vocational training, and horticultural therapy to people with disabilities, employment barriers, and those recovering from domestic violence. We also offer a residential composting

Star Farm Chicago manages three main production sites within the Back of the Yards neighborhood, totaling 6600 sq ft of production space. Star Farm Chicago practices organic growing methods, prioritizes purchasing certified organic, non-GMO seeds, and uses OMRI approved agricultural inputs and pest management supplies.

(G-1.1)

Management

Management must designate individual(s) with roles, responsibilities, and resources for food safety functions within the plan. In addition, a 24-hour emergency contact must be provided as well as a provision in the event that key personnel are absent during a food safety emergency. **(G-1.2) (§112.23)**

Self-audits

The farm must have documented self-audit procedures, conducted at least annually. Any required corrective actions should be documented. **(G-8.1)** The self-audit can be used as the annual review method for the food safety plan. Document the date revisions were completed on the front page of the plan. **(G-9.1)**

Documentation

This section is included because of broad requirements in the Harmonized Audit. They can be met in ways throughout this plan as well as through records and SOPs you keep as part of your food safety plan.

Documents and records of procedures, standard operating procedures (SOPs) and policies are in place for meeting each of the food safety standards identified in the Farm Food Safety Plan. Records comply with prevailing regulations. Documentation is available for inspection and is maintained for a minimum of two years. **(G-3.1, G-3.2, G-3.3)**

Traceability Procedures

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

A functional traceability system allows you to trace your product one step forward and one step back. If you are a fresh produce grower, this means you know which field a particular lot came from and the day it was harvested AND when and to whom that lot was sold. In the event there is a foodborne illness outbreak, you will be able to identify what products you have in the marketplace and recall product if necessary. The traceability system can be developed from a system you already have in place based on invoicing and harvest dates. Although it can be very high tech with bar codes and computers, it does not need to be. The important part is to know what product went where on what day.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Niche considerations: Direct Marketers

It is difficult to track every individual who buys your product if you sell at a farmers market or have a self-service farm stand. One way to begin a traceability system for these markets is to keep track of what you took to market (where it came from and when it was harvested) and document what was sold (date and location). Essentially, the market becomes the step forward. If you have an on-farm market, keep track of what you put out and how much is sold each day. The benefit to this is that it will help you practice first-in, first-out in your coolers, keep the inventory moving, and know how much money should be in the cash box at the end of the day. If you are selling newly harvested crops, just document on a clip board how much you put out and sold that day.

As an example, you can create a diagram/field map to reference and use a harvest log that gives locations of field and/or plots where product came from, the date it was harvested, packed, and sold. If you attend multiple markets, you can number the markets and reference the market number where it was sold. Use this to help simplify the method you use to create a reasonable traceability procedure.

Here is an example of a system you could use.

Our farm utilizes a [DESCRIBE YOUR SYSTEM HERE] traceability system that allows us to trace product one step back (field) and one step forward (customer). **(G-1, 1-26) (G-6.1)**

For example: when selling cases to a buyer, use a sticker on each box, bag, etc. Each case of produce packed has a sticker that identifies:

- Who packed the produce (crew #, group, individual)
- The field it came from
- The date it was harvested
- The date it was packed
- The date of shipment

The information above can be used to create an ID# on the package

For the Harmonized audit, the following are required for traceability:

- Source of produce or production inputs
- Date of harvest
- Quantities
- Farm identification (field or block)
- Transporter and non-transporter (i.e., persons who own food or who hold, manufacture, process, pack, import, receive, or distribute food for purposes other than transportation)

A traceability exercise must be performed at least annually and achieve 100% reconciliation of product within 4 hours, or as required by applicable regulations. **(G-6.2)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

To test our traceability plan, we conduct a mock recall. In the recall, a buyer is contacted and asked to identify a load received from our company. We ask how much of the product has been sold and how much they still have in inventory. This information is recorded in our mock recall form and kept on file. **(G-2) (G-7.1)**

Recall programs must be established with designated **recall team members** and **written procedures** for the trace back and trace forward exercise included in the plan.

For a mock recall for the direct market farm, include which product went where (one step forward) and which product came from which field/plot and when (one step back). An example of something to use for recordkeeping with this can be the GAPs Field Log. The log can be tailored to fit your own operation.

Description of how you label and identify lots (units). Lot identification/labels should be able to link each individual lot to the:

- Grower(s)
- Field (location)
- Date harvested or date received if co-packing
- Individuals involved in harvesting
- Total number of packages in the lot
- Shipping and receiving dates

The traceability codes should be traceable on invoices delivered to the customers by date identification. Each date code label will correspond to a certain harvest period, person, and field.

Company Health and Hygiene Policy (G-10.1)

Training: All employees receive training when they start work on the farm and a refresher course at least once a year. **(G-5) (G-4.1) (§112.21)** Employees include those that work on the farm that plant, care for, harvest, scout pests, process, and pack fresh produce.

Training includes instruction on all company policies related to worker health and hygiene and, where appropriate, specialized training related to specific jobs such as anyone who applies pesticide sprays, as required by law. **(G-6) (G-4.2) (§112.22)** Contracted personnel whose activities can affect food safety are held to the same food safety standards as they would be as employees. **(G-4.3)** All worker training is documented in the worker training log. **(§112.30)**

Disciplinary policy: A policy must be established with corrective actions for workers who violate established food safety policies and procedures. **(G-1.3)**

Visitor health and hygiene policy: All visitors will sign in at the farm and read a copy of farm policies regarding health and hygiene. Visitors are defined as anyone on the farm for more than 15 minutes to conduct farm-related business. **(G-4, G-6) (G-10.2) (§112.33(a))**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Define what a visitor is vs. a customer just picking up product from farm (CSA pickup). Long-term visitor vs. short-term visitor.

Develop a short company visitor policy.

Visitors will wash their hands upon entering the farm. They will wear hair protection in the form of a hat or hairnet. Visitors are not allowed to pick produce or handle product without the express permission of the host. All visitors will sign in upon arrival and sign out prior to departure.

Handwashing: Everyone must wash their hands before beginning work and returning to work after taking breaks, going to the restroom, eating, smoking, or otherwise compromising the sanitary nature of their hands. Signs in English and [NATIVE LANGUAGE OF THE WORKERS] are posted in lavatories, eating areas, and smoking areas to instruct employees to wash their hands before beginning and returning to work. **(G-7, G-8) (G-10.7, G-10.8) (§112.32(b)(3))**

First aid procedures: If someone is injured at the farm, either in the packinghouse or in the field, the first aid kits are available for use at [LOCATION OF FIRST AID KIT]. The supplies are checked and updated [MONTHLY]. All workers are instructed during training to attend to injuries immediately. This includes any cuts, abrasions, or other injury incurred while working. Employees should notify their supervisor and fill out an accident report. If the injury is critical or life threatening, employees are instructed to call 911 for proper care. **(G-14) (G-10.21)** Employees with exposed cuts, sores or lesions shall not be engaged in handling product. **(G-10.19)**

Illness: Any employee who is sick should notify their supervisor immediately and not handle fresh produce or food contact surfaces. If an employee does not self report and is found to be sick by the supervisor, the employee will be immediately dismissed from work and not allowed to return until they are symptom-free. **(G-12) (G-10.18) (§112.31)**

1) These symptoms preclude an employee from working and handling fresh produce or food contact surfaces:

    - Diarrhea
    - Fever
    - Vomiting
    - Jaundice
    - Sore throat with fever
    - Lesions containing pus (including boils or infected wounds, however small) on the hand, wrist, or any exposed body part

2) If an employee is recognized as having any of the conditions listed above, these conditions will be recorded on an Illness/Injury Report Form.

Blood and body fluid: If blood or other bodily fluid should come in contact with the field, produce, or food contact surfaces, it will be addressed immediately. If a person is not able to

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

immediately deal with the contamination due to injury, that person will mark the area if able and immediately notify his/her supervisor who will take appropriate action. If an employee is injured in the field or packinghouse, their supervisor, after assuring their safety, will immediately inspect the area where the injury occurred to be certain no blood or other bodily fluids have contaminated the area. If there is blood in the field, all contaminated surfaces will be removed to a plastic bag with a shovel or gloved hands and placed in a trash can. All affected soil will be shoveled up around and under the area and will be removed. All affected produce will be discarded as well as all packing materials. All actions will be documented [WHERE]. **(G-13, G-14) (G-10.20)**

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. (G-3) (G-10.17)**

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 supervisor so they can evaluate the situation. If employees notice pests or other food safety issues, they are encouraged to share this information with their supervisor. Our company food safety policy includes all employees and is companywide.

Note: For U-pick or pick-your-own operations, you may want to have a visitor policy that informs visitors about your food safety rules and expectations. Issues that you may want to cover include location of toilet and handwashing facilities, whether or not you allow personal containers in the field such as glass bowls, the prohibition of pets, etc.

Pick-your-own visitor policy: All farm policies applicable to pick your own customers are posted at the entrance to the field so that they are aware of farm policy.

Community Supported Agriculture (CSA) Members: All CSA members and their families are given a copy of company policy when they join the CSA and a sign is posted in the field to remind them of proper behavior.

Post your farm rules for visitors and CSA participants.

Agricultural Chemicals/Plant Protection Products

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 INDIVIDUALS AND LICENSE NUMBERS HERE OR LIST COMPANY THAT APPLIES CONTRACT SPRAYS] **(G-15)**

Even OMRI (organic materials review institute) approved substances may not be safe to have around ready-to-eat produce.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Pest Monitoring for Chemical Application Decisions

Licensed applicator [NAME HERE, ID #] is responsible for inspecting crops during critical periods to determine whether the pest population is likely to cause economic losses. If so, (s)he will apply chemicals and pesticides according to IPM standards at minimal rates.

Chemical Application and Recordkeeping

Agricultural chemicals will ONLY be applied by and disposed of by licensed applicator [NAME HERE, ID #], who will use proper safety equipment. The water used with the chemicals will be safe. Records of applied chemicals will be kept in accordance with regulation, including date, chemical and trade name, EPA registration number, rate applied, weather conditions, stage of crop, target pest, area treated, and applicators name.

Chemical General Usage and Storage

Chemicals will be applied according to label directions, and at a lesser rate if possible. Rinsate and excess chemical material will be stored in a safe location and used according to the label. Chemical containers will be triple-rinsed and disposed of safely.

Chemicals will be stored in a separate, designated area that is locked. The storage box will be made of an impermeable material and will only be used for chemicals.

All chemicals applied must comply with label directions and prevailing regulations. Agricultural chemicals are applied by our trained, licensed, or certified application personnel. **(F-2.1, F-2.3; P-2.1, P-2.3)**

Certified Personnel and License Numbers
1) [ENTER WORKER NAMES AND CERTIFICATIONS HERE]

Products intended for export must consider the requirements of the intended country of destination (MRL entry requirements). **(F-2.2; P-2.2)**

Water used in the application of agricultural chemicals on the farm does not serve as a source of contamination to fresh produce, field, or packinghouse areas. **(F-2.4) (§112.44(b))** Disposal of agricultural chemicals does not serve as a source of chemical contamination of produce or packing areas. **(F-2.5)**

Clothing, Jewelry, and Cell Phones Policy

Employees will wear clean clothing to work every day. **(G-10.9) (§112.32(b)(1))** When required, employees will wear appropriate supplied clothing including hats, hairnets, aprons, and disposable gloves. **(3-13, 4-29) (G-10.10, G-10.11, G-10.13) (§112.32(b)(4))**

A written policy is required for glove and hair covering use (hairnets, beard nets, caps) to ensure that all workers are aware of the expectations and company policy.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

No jewelry is permitted in the field, around machinery, packinghouse, or packing facility with the exception of a plain wedding band (no stones allowed) and wristwatches. **(3-14, 4-30) (G-10.12) (§112.32(b)(5))**

Cell phones are not allowed unless they are required for farm business. All cell phones will be stored in lockers or kept in a belt holster or pants pocket.

Racks and/or designated storage areas for worker belongings, protective clothing, and tools must be provided and not serve as a source of contamination. **(3-12, 4-28) (G-10.14)**

Policy on Taking Breaks

Breaks that include smoking, eating, chewing gum or tobacco, or drinking (other than water), must be taken in areas away from fresh produce production and packing. In the packinghouse, there are designated break areas (see packinghouse map). Breaks in the field are taken in designated areas (not in production nor near harvestable crops). Short rest breaks are permitted in the field during production as long as workers are not smoking, eating, chewing gum or tobacco, or drinking (other than water). **(G-11) (G-10.15, G-10.16) (§112.32(b)(6))**

All personal items must be stored in designated areas in the field, break room, and packinghouse. Under no circumstances will glass containers be allowed in the field or packinghouse. **(G-10.14; F-8.4; P-3.3)**

Proper Handwashing Technique

All employees handling produce for processing or sale will use proper handwashing techniques before beginning work and after returning to work after taking breaks, going to the restroom, eating, smoking, or otherwise compromising the sanitary nature of their hands. **(G-10.7) (§112.32(b)(3))**

Proper handwashing technique includes the following:

1. Wet hands with clean water (warm is preferred if available), apply soap, and work up a lather.
2. Rub hands together for at least 20 seconds.
3. Clean under the nails and between the fingers.
4. Rub fingertips of each hand in suds on palm of opposite hand.
5. Rinse under clean, running water.
6. Dry hands with a single-use towel.

It is important to remember to wash hands after touching any potentially unsanitary surface. When possible, turn off the faucet with the single-use towel instead of directly with the hand when using a sink and faucet that is not automatic or knee- or foot-operated.

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

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Note: A video by the Cornell University Food Science Department is available in English, Spanish, and Hmong, and may be used as a training resource when introducing employees to proper safe food handling methods. The video is titled *Fruits, Vegetables, and Food Safety: Health and Hygiene on the Farm* and is available on the Produce Safety Alliance YouTube channel.

Toilet and Handwashing Facilities

Clean and well-maintained toilet and hand wash facilities are provided for all employees, visitors, and customers. Employees are instructed that used toilet tissue shall only be disposed of in the toilet. **(G-10.5)** All toilet/restroom facilities are properly supplied with single-use towels. These facilities are checked on a daily basis. Restroom facilities are serviced and cleaned [HOW OFTEN]. Monitoring, restocking, and cleaning are documented on the Restroom and Field Sanitation Logs and are located [WHERE THE RECORDS ARE STORED]. **(G-9, G-10) (G-10.3, G-10.6) (§§112.32(b)(3), 112.33(b), 112.44(a), 112.129, 112.130, and 112.133)**

Note: If you have a significant number of farm workers and must meet OSHA requirements, be sure you have the appropriate number of toilets to meet the federal requirements. OSHA 1928.110(c)(2)(i) One toilet facility and one handwashing facility shall be provided for each (20) employees or fraction thereof, except as stated in paragraph (c)(2)(v) of this section. OSHA 1928.110(c)(2)(v) Toilet and handwashing facilities are not required for employees who perform field work for a period of three (3) hours or less (including transportation time to and from the field) during the day.

The number, condition, and placement of field sanitation units comply with applicable state and/or federal regulations. **(2-2, 2-3) (G-10.4)**

The field toilets are located away from the growing fields to avoid contamination by fecal material. **(2-4)** Flush toilets and sinks located on the farm are on [TYPE OF SEWAGE SYSTEM such a private septic system or municipal sewage line].

Indoor facilities can be used in small operations if within ¼ mile walking distance from fields or if transportation is readily provided.

There are no municipal sewage treatment facilities or waste material landfills adjacent to the farm. **(1-7)**

Note: Cleaning and servicing of the unit may be contracted with a sanitation unit rental company. If this is the case, documentation will be provided by and collected from the contracted company. A representative map may be provided showing where the sanitation unit(s) is located relative to the agricultural plots.

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 prevents contamination of the produce.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

(2-5) (F-1.3) (§112.131(c)) 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 log and kept in our records.

Procedure for handling a septic or sanitation hazard in the packinghouse

Packinghouse toilets are located away from the packing area. All restrooms have floor drains to control any toilet overflow or sanitation leak. These drains go to a private septic system that is properly maintained to prevent direct or indirect product contamination. The farm sewage treatment system/septic system is functioning properly and there is no evidence of leaking or runoff. **(1-6) (P-6.10, P-6.11) (§§112.131(b) and 112.133)**

Irrigation Water and Water Used for Topical Sprays

Note: All irrigation water and water used to mix topical/pesticide/protective sprays should be tested for generic *E. coli* and the tests should be quantified. Depending on the source, the frequency of testing will vary.

Frequency:

Municipal: Obtain a copy of test results at least yearly from your county/municipality and keep it on record.

Well: At least once per year during production.

Inspect well, especially shallow or hand-dug wells for contamination when in low lying areas or near potential runoff that can come into contact with water. Inspect cap to make sure it is intact.

Surface: At least 3 times per year per source. Recommended sampling times include at the beginning of irrigation, high use, and prior to last irrigation event so there is enough time to get results before the last irrigation begins.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Testing Protocols: Contact a reputable lab to test your water. Follow their instructions for taking the sample and submitting the sample. Here are some general guidelines to help you understand what labs may offer or ask you when you attempt to have your water tested.

> 100 ml sample, quantified generic *E. coli* using one of the methods designated by FDA as acceptable under the FSMA Produce Safety Rule.
>
> **Method options**: Colilert with an upper limit of 2400 CFU/100 ml tends to be widely available. Use a sterile sample container or whatever is provided by the lab. Wash hands before collection, collect at a consistent location, using a consistent method, and follow lab instructions. May need to make cup on stick for water recovery or purchase a water-sampling tool. Deliver to the lab within 6 hours.
>
> **Other EPA approved methods**: mTec, modified mTec, MI agar, m-Endo followed by NA-MUG agar, mColiBlue (See https://www.fda.gov/downloads/Food/FoodScienceResearch/LaboratoryMethods/UCM575255.pdf for details.)
>
> **Not EPA approved but common**: petri film (1 ml sample size), SimPlate

Our farm tests water used for irrigation and mixing with topical sprays. Our water sources include [ADD WATER SOURCE HERE]. **(1-1)** **(F-3.2)** It is/they are tested [ADD AMOUNT OF TESTING HERE] times per year and these records are kept on file. 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. All reviews are documented and any mitigation actions are documented in our water testing log [SEE DOCUMENTATION]. **(1-3, 1-4, 1-5) (§§112.44(b), 112.45, 112.46, and 112.50)**

We utilize [TYPE OF IRRIGATION METHOD USED HERE such as overhead, drip, microjet] irrigation method. **(1-2)**

Consideration: overhead vs. trickle based on type of crop, plant growth stage, and days before harvest. Look to minimize risk when making decisions.

Water tanks, such as those used for dust control, are cleaned at a sufficient frequency so as not to be a source of contamination. **(F-8.6)**

Water Testing

Our farm has a written procedure for water testing during production and harvest season that includes:

- Frequency of sampling
- Who is collecting samples
- Where samples are collected
- How the samples are collected
- Acceptable hold time prior to lab delivery

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

- Type of test conducted
- Acceptance criteria
  (G-5.4)

If water is from a municipal source, municipal testing will suffice. **(F-5.2) (§112.47)** The frequency and point of sampling is determined based on the risk assessment and current industry standards for that commodity, if applicable. **(G-5.2, F-5.2)** All water test results are kept on file for a minimum of two years. **(G-5.3) (§112.50(b)(2))**

Water System Description, Risk Assessment, and Management Plan

A water system description is included in the farm food safety plan. **(F-3.1)**

- Maps, photos, drawings or other means to communicate water sources
- Locations of permanent water fixtures (wells, gates, valves, returns, etc.)
- Flow of water system (including holding systems, reservoirs, water for re-use)

Water systems are not cross-connected with human or animal waste systems. **(F-3.3) (§112.133(d))** The water delivery system shall be maintained so as not to serve as a source of contamination of produce, water supplies or equipment with pathogens, or to create an unsanitary condition. **(F-10.4)**

A risk assessment of water sources has been performed on [ENTER DATE, LOCATION HERE]. **(F-4.1) (§§112.42(a) and 112.50(b)(1))**

The risk assessment includes:

- Potential physical, chemical, and biological hazards
- Characteristics of the crop (above/below ground, etc.)
- Stage of the crop when water is applied
- Water application method

Our farm has a water management plan established to mitigate risks associated with the water system including:

- Preventive controls
- Monitoring and verification procedures
- Corrective actions
- Documentation
  (F-5.1, F-5.3)

If water is treated to meet microbiological criteria, the treatment is approved and effective for its intended use, and is appropriately monitored. **(F-5.4)** If postharvest handling is used to achieve microbial criteria, the farm maintains the documentation supporting its use. **(F-5.5)** If the operations uses an alternative approach to regulatory microbiological testing, the operation has scientific data or information to support the alternative. **(F-5.6)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Farm Location and Land Management

Note: It is best to do an adjacent land assessment so you know what is around your farm that may be a hazard. Being adjacent to manure lagoons or livestock production areas, including dairy and confined animal feeding operations, may represent hazards. If you have significant wild animal issues, you need to be aware of their associated food safety risks and address the management of them through use of nuisance permits, fencing, annoying cannons, or other deterrents. Google Earth offers aerial views of your land and surrounding properties that can give insight into potential risks from other locations.

Crop production land has been farmland for [# OF YEARS] per knowledge of the farm owner. There are no concerns about previous land use related to microbial contamination of crops. Cropland is not susceptible to flooding. **(1-23, 1-25)** If any land use history indicates a possibility of contamination of soil or cropland, please indicate measures that were taken to address the concern including test results from any soil samples that were tested. **(1-24)**

An annual evaluation of land use and adjacent land must be conducted to document any risks associated with land, equipment, or structures. **(F-1.1)**

Any indoor growing facilities and field storage facilities are designed, constructed, and maintained to prevent the contamination of fresh produce. **(F-1.2)** **(§112.126)**

Animals/Wildlife/Livestock

Our farm has a written risk assessment for animal activity in and around the production area. The annual risk assessment is located in the back of this document. **(F-6.1)**

Livestock

Crop production areas are not located near livestock production areas or manure lagoons. **(1-8, 1-9)** Livestock are restricted from on-farm ponds and other sources of irrigation water. Our farm also restricts domestic animal access to food handling facilities. **(1-11)** **(P-4.2)** **(§112.127)**

Rotations with livestock – treat the same as the National Organic Program's 90/120 day raw manure rule, as specified in 7 CFR 205.203(c)(1).

If livestock are grazed nearby, inspect and provide filter strips to separate livestock areas from production areas in the event of washout from a rain event. Look at slope of land and adjust cropping strategies accordingly.

If farming with horses, mules, oxen, etc. timing and special considerations will be critical. How do you deal with manure from a working animal? For example, describe your practices such as field preparation prior to planting, cultivation, plant stage of growth, etc. The 90/120 day rule directs that in these cases, manure must be prevented from contaminating crop. There are options such as bunt bags to catch poop or a bucket and shovel. The important thing is to have a

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

plan to make sure manure and urine do not get on fresh produce either by direct deposition or through splatter. Have a plan, follow the plan, and document your actions.

Wildlife

Wildlife activity is monitored and deterred through [STATE METHODS USED TO EXCLUDE WILDLIFE FROM FIELDS OR DETER THEIR PRESENCE]. **(1-12, 1-13) (F-6.2, F-6.3) (§§112.83 and 112.84)**

You could identify species of concern and methods that are currently being used to deter them. Could also add a pre-harvest survey to ensure fields have not had significant animal activity. Significant animal activity means that there is noticeable fecal material or crop destruction due to animal traffic. If fecal evidence is found, you can mark an area of defined distance around the fecal material and harvest outside the perimeter. The distance will likely vary by crop. A starting distance to consider might be a 5-foot radius around the fecal material. Be sure to include this information in your plan or as an SOP.

Deterrents such as coyote decoys when used actively are quite effective at "repelling" deer, geese, and groundhogs. Training deer to feed on soy or bush beans (trap crops) using planting barriers between where the deer come in and the production field is another option.

Geese can be deterred from ponds using swan decoys and/or coyote decoys. To reduce nesting, mow down tall grass from around ponds.

Fence and Field Inspections

Note: In addition to noting any signs of animal activity while carrying out everyday farming activities, walk through or around the fields daily and note signs of animals passing through or feeding in the fields. Inspect the fence lines at least every two weeks.

Inspection of fences and fields includes 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 maintenance log.
- Making sure there are no weaknesses or places where animals are clearly entering and exiting the fields.
- Checking to see if any part of the fence needs to be re-baited for deer.
- 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 documented and not harvested.

Soil Amendments

A risk assessment is conducted for the soil amendments used on our farm. This includes their preparation, application, and proper storage. **(F-7.1) (§§112.52, 112.54, 112.55, 112.56, and 112.60)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Manure

If not using manure at all, state that fact in the farm food safety plan. **(if Option C: No Manure/Biosolids Used, then 1-22 applies)**
No animal manure or municipal biosolids are used on the farm.

If using raw manure, outline exact usage.
Raw manure (un-composted) is applied and incorporated [DAYS PRIOR TO] harvest. Raw manure is applied at least 90/120 days before harvest (for crops not in contact with the soil versus crops in contact with the soil, respectively) and applications are documented in the Manure Application Record. All manure is stored in areas away from crop production areas. **(1-10, if Option A: Raw Manure, then 1-14, 1-15, 1-16, and 1-17 apply) (F-7.2) (§§112.52 and 112.56(a)(1))**

If using composted manure, outline exact usage, methods of processing, or include Certificates of Analysis (COAs). **(if Option B: Composted Manure, then 1-18, 1-19, and 1-21 apply)** All composted manure and treated biosolids are stored in a way that minimizes the risks of recontamination. **(1-20)**

Composted manure is also applied. Records are maintained as to the type of composting (passive or active), composting time, temperature of pile (if active), and microbial testing reports for active treatment. **(§112.60(b)(2))**

Compost piles are covered to reduce the chance of runoff, leaching, wind spread, or recontamination. **(§112.52(a) and (b))** If composted manure or treated biosolids are purchased, documentation of analysis reports are received for each shipment and kept with the manure records. **(§112.60(b)(1))**

Note: Some buyers and marketing agreements have requirements far beyond those detailed here. If you voluntarily sign up for the marketing agreements, you MUST follow their parameters.

Composting Practices

Manure compost is turned frequently to maintain proper oxygen and moisture levels, and to ensure that the entire amount of material is heated properly to destroy pathogens and weed seeds.

After piling, a carbon source such as straw is added and mixed with raw manure to maintain an ideal carbon:nitrogen (C:N) ratio of 25-30:1.

The temperature is maintained at over 131°F for 15 days to destroy pathogens and weed seeds. During this time, the pile is turned to maintain proper oxygenation and to make certain the entire pile is exposed to the high temperatures. Appropriate records are kept to confirm compost procedures are followed. **(§112.60(b)(2))**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

The National Organic Program Regulatory Text
https://www.gpo.gov/fdsys/pkg/CFR-2011-title7-vol3/pdf/CFR-2011-title7-vol3-sec205-203.pdf
7 CFR §205.203 Soil fertility and crop nutrient management practice standard

(c) The producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. Animal and plant materials include:

(1) Raw animal manure, which must be composted unless it is:

(i) Applied to land used for a crop not intended for human consumption;

(ii) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or

(iii) Incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles;

(2) Composted plant and animal materials produced though a process that:

(i) established an initial C:N ratio of between 25:1 and 40:1; and

(ii) maintained a temperature of between 131° F and 170° F for 3 days using an in-vessel or static aerated pile system; or

(iii) maintained a temperature of between 131° F and 170° F for 15 days using a windrow composting system, during which period, the materials must be turned a minimum of five times.

Harvesting

A preharvest assessment is performed on our farm. **(2-1) (F-9.1) (§112.112)** In our assessment we look for signs of physical, chemical, or biological contamination of the crop, including, but not limited to:

- Animal fecal material or signs of animal activity
- Glass, metal, or other debris that may pose a physical hazard
- Signs of chemical contamination, including gasoline, other fuel, or agricultural chemicals

Mechanically harvested product is inspected to remove foreign objects such as glass, metal, rocks, or other dangerous material. **(2-13) (F-12.3)**

Workers also are trained not to harvest decayed or contaminated produce. **(F-12.1) (§§112.22(b)(1), 112.83(b)(2), 112.112, and 112.113)** Our farm has a dropped produce policy and does not allow produce that has touched the ground (but does not normally grow on the ground) to be harvested. **(F-12.2) (§112.114)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Cloths, towels, or other cleaning materials that pose a risk of cross-contamination are not used to wipe produce. **(F-12.4)**

Sampling/Product Testing

Where lab analysis or microbiological analysis is required in the food safety plan for testing of product, the testing is performed by a lab that is validated to use Good Laboratory Practices (GLPs). **(G-5.1)** [ENTER YOUR LAB INFORMATION AND TESTING REQUIREMENTS HERE]

There is no requirement to test your product, but if you do, you must utilize a GLP lab and document this information including name and contact information in your plan.

Raw Material Sourcing

Our farm has an approved supplier program for all incoming materials, including packaging. A current list of approved raw material suppliers is located at the end of this document. Our program also includes procedures for accepting materials from alternate sources, if needed. **(G-2.3)**

Harvesting Tools, Containers, and Carts

If an object comes into contact with produce it must be clean, in good working condition, and sanitized or disinfected. This includes, but is not limited to, hands, harvesting equipment (knives, etc.), harvesting totes and boxes, transportation equipment, processing equipment (tables, cooling tubs), and storage equipment. **(2-6, 2-7, 2-8, 2-9)** Equipment cleaning and sanitizing operations shall be conducted away from the product and other equipment to reduce the potential for contamination. Water used for cleaning and sanitizing shall meet the microbial standards for drinking water. **(F-8.5, F-10.1)**

Prior to moving product from the field, excessive dirt and mud will be removed from totes and pallets as much as possible. **(2-16) (P-5.1)** Any water applied to harvested product is microbiologically safe. **(2-15) (F-10.1)**

Note: Microbiologically safe could mean that you use municipal water that is tested by the municipality prior to distribution or you could test your water for Total Coliforms using a presence/absence test. If the water is (-), this would be considered microbiologically safe. You should state how you know your water is microbiologically safe.

Harvesting Totes, Containers, Packaging

Our farm has a written policy regarding storage and handling of product-contact containers. Any containers not in use will be stored in a clean and secure location. [ENTER YOUR POLICY HERE]. **(3-29) (F-11.1, F-12.6; P-8.2, P-9.4)**

This policy may include a written statement as to whether product containers are permitted to have direct contact with the ground and soil. **(F-12.7, P-8.3)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Our farm has a written policy describing acceptable product-contact containers including type, construction, and condition. **(F-11.3, P-8.5) (§112.116)**

The harvest containers are kept in good repair and damaged ones are immediately discarded or repaired. Harvesting totes will have a written policy to be inspected, cleaned, and disinfected before each harvest season and whenever needed. **(2-6, 2-8) (F-11.2, F-13.2; P-8.4) (§112.123(d)(1))**

Our farm has a written policy prohibiting the use of harvest containers for non-harvest purposes**. (F-11.4; P-8.6)** Harvesting totes will not be used for carrying anything but produce. **(2-14)** If something other than produce is placed in a harvesting tote, that tote must be cleaned and disinfected.

All containers used for field packing are new, single use containers. These containers are stored in clean, plastic wrapped boxes prior to use. **(2-19, 2-20, 3-27)** Packaging materials used for harvest are appropriate for their intended use and commodity. **(F-12.5) (§§112.115 and 112.116)**

Specifications for all packaging materials (including labels) that impact product quality or safety are kept on file [ENTER LOCATION HERE] and can be provided, if necessary. **(P-8.1)**

Garden Carts/Wagons

Check the garden carts daily for cleanliness. The harvest/garden carts used for carrying cases of produce out of the field will be cleaned weekly or more often as needed. **(§112.123(d)(2))** This cleaning and inspection will be recorded in a garden cart maintenance log.

Harvesting Tools

Any tool, such as a knife, used to harvest produce will be cleaned and disinfected before use each day and as frequently as reasonably necessary to protect the produce from contamination. **(2-7) (§§112.123(d)(1) and 112.140(b)(2))** This tool must be logged as *in use and disinfected* in the tool log book. If this is not done, the tool may not be used for harvesting. **(F-8.1, F-8.2)**

Pallets

Pallets are repaired and cleaned as necessary. **(3-28) (P-8.7) (§112.123(d)(2))**

Broken Glass

No glass containers are allowed in the field or packinghouse. All light bulbs are shatterproof or are shielded with shatterproof sleeves or covers. **(2-10)** Any broken glass will be placed in a cardboard box that is sealed, and placed in a secure trashcan. **(2-11)**

[This should be expanded to a SOP that addresses broad product contamination including glass, plastic, chemicals, pesticides, petroleum, and physical hazards per audit]. **(2-11, 2-12) (F-8.4)**

Vehicles in the Production Fields

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Transporting produce from the field to storage or processing

Any product that is being moved from the field to the processing and storage house will be covered. **(2-18)** Any vehicle or means of moving the harvesting totes to the processing house will be clean and in good repair. **(§112.125)** 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, petroleum product, automotive lubricant, or other fluid

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. **(2-17) (P-6.6) (§§112.123(d)(2), 112.123(e), and 112.125)**

Our farm policy is to inspect all vehicles prior to loading. We have an SOP that describes the process and have created checklists to help verify the cleanliness and functionality of transportation units from the field to the packing and/or storage areas. **(F-14.1)**

Our personnel are also trained in proper loading and unloading practices to minimize damage to the produce and to prevent contamination. **(F-14.2)**

Note: It is preferred that you only use designated carts, containers, and vehicles for moving produce to the storage shed. Consideration for all-purpose vehicles that not only haul produce but carry other things such as dogs, compost, bags of fish fertilizer, hunted game, etc. include keeping them clean for the picking season and going to market.)

Product moving out of the field is uniquely identified to enable traceability in the event of a recall. **(2-21)**

Gas and Petroleum Spills or Leaks

Vehicles, equipment, and tools are controlled so as not to be a source of chemical hazards. Our farm has a written procedure to address the spills and leaks (fuel, oil, hydraulic fluids) which might occur during equipment operation in the field. **(F-8.3)**

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.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

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

Note: The contaminated soil can be treated on-site or sent away for treatment; what you do will depend on the amount of contaminant and the soil to be treated.

After the cleaning process is finished, you must submit a report of the incident describing the oil that spilled and the amount, how the spill was cleaned, and also 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.

Detailed instructions can be found on the Minnesota Pollution Control Website, http://www.pca.state.mn.us/.

Packing and Storage House Sanitation

Design and Construction

The facility is designed, constructed, and maintained in a manner that prevents contamination during staging, cooling, and storage and is appropriate to the commodity. **(4-1, 4-12) (P-3.1, P-9.1, P-9.9) (§§112.126 and 112.128)**

This includes:

- Floor drains that are free of obstructions. **(3-22)**
- Floors, walls, ceilings, doors, frames, and hatches that are able to be easily cleaned and do not serve as a harborage site for pests or contamination **(3-23, 4-3**)
- Chilled/cold storage areas that are properly maintained, sealed, drained, and graded
- Fixtures overhead such as ducts, pipes, and catwalks that are installed and maintained properly so that condensation does not drip onto produce **(P-3.4) (§112.126(b)(2))**
- Drip pans and drains that are maintained so as not to become a source of contamination
- Air intakes that are not located next to sources of contamination (such as a manure pile outside)
- Adequate lighting that is provided to enable sufficient cleaning, sanitation, and repairs **(P-3.2)**
- Adequate space between rows of stored materials to facilitate cleaning and inspection **(P-9.5)**
- Equipment that is installed in a way that provides easy access for cleaning **(P-5.2) (§112.123(b)(1))**
- Temporary repairs on food contact surfaces are constructed of food grade material and a timely permanent repair is scheduled **(P-6.2)**

Considerations for packinghouses that are **not enclosed:**
Note: Packing facilities that are NOT closed will automatically lose 5 points on the GHP/GAP audit. **(3-20)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

- 4 sticks and a lid: If your packinghouse is just a roof with supports or a tent or a canopy, you will need to consider additional risks. For instance, if the roof has rafters, you must deter birds from roosting with nets, spikes, or some other method. You may not need rodent control for the ground, but may need to make sure you mow or maintain the grounds around the area to deter pest harborage. If flies are an issue, you could use fans to deter them. The important thing is to assess the risks and work to reduce whatever risks exist.
- Open air: Keep the area clear and control dust and dry dirt from blowing around if that is an issue. If your open-air packing is under a tree, controlling birds may be necessary.

Packing and Storage Area Maintenance

The packing and storage house will be accessed by authorized and trained personnel only. Facilities are inspected for foreign material prior to use and records are maintained. **(4-2)** A preventive maintenance and/or master cleaning schedule, including SOPs is established and located at the end of this document. All workers are trained to properly follow and implement our company's SOPs. **(P-6.1)**

Our farm has a policy instructing workers on how to handle finished product that has been damaged, opened, spilled, or comes into contact with the floor, or other potential contaminants. [ENTER POLICY HERE]. **(3-26, 4-7)**

Our farm has a policy to only pack and store produce from our own farm and/or from suppliers who follow the same rigorous food safety standards. **(P-1.1)** Product delivered to the packinghouse from the field is protected from contamination during the staging period through [DEFINE HOW PRODUCT IS PROTECTED]. **(3-1, 3-2, 4-10) (F-13.1) (§112.113)**

The packing and storage facilities will be clean and orderly before and after use. At the end of each day, packing areas are dry swept and free from trash and litter that may contaminate produce or food contact surfaces. **(3-17, 4-4) (G-11.1, G-11.2; P-6.7) (§112.132)** These areas are also free of standing water and drains are free from obstructions. **(3-18, 3-21, 3-22, 4-5)**

Any wastewater spillage is prevented from contaminating any food handling areas through the use of drains, berms, or sufficient distance. **(3-25, 4-6)**

Packing containers are properly stored and sufficiently sealed, to be protected from contamination (birds, rodents, pests, and other contaminants). **(4-8)** Pallets, pallet boxes, tote bags, and portable bins, etc. are clean, in good condition, and do not contribute foreign material to the product. **(4-9)**

All other storage for non-produce items (such as other equipment, office supplies, toilet supplies, etc.) are not located in close proximity to the product and must be kept clean and well maintained so as not to serve as a source of contamination. **(4-11) (P-9.3)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Equipment, utensils and tools used for cleaning or sanitizing, including food contact and non-food contact surfaces, are maintained in a manner sufficient to avoid becoming a source of produce contamination and are stored away from product handling areas. **(P-6.4)**

If used, foreign material control devices shall be included as part of a Preventive Maintenance Schedule or other program and maintained to ensure effective operation. Calibration checks shall be performed according to written procedure or manufacturer's recommendations. **(P-5.5)**

Food Grade Cleaners and Lubricants

Only food-grade cleaners may be used in cleaning either the processing surfaces or the storage cooler. **(P-6.3)** Sanitation chemicals have their own storage area separate from the processing line and away from any stored produce. **(3-16) (F-13.3; P-9.6)**

Only food grade lubricants are used on equipment related to packing or where harvesting equipment can come in contact with produce in the field. Our operation commonly uses these lubricants: [ADD LIST OF LUBRICANTS HERE]. **(3-15) (P-5.3)**

Broken Glass

No glass containers are allowed in the field or packinghouse. All light bulbs are shatterproof or are shielded with shatterproof sleeves or covers. Any broken glass will be placed in a cardboard box that is sealed, and placed in a secure trashcan. **(3-24) (P-3.3)**

External Grounds

Areas outside the packinghouse are well maintained (well-mowed or graveled). They are free of debris that would harbor pests and free of standing water. Garbage cans/dumpsters are covered and located away from packinghouse entrances. **(3-19) (P-6.8, P-6.9)**

Storage Cooler

Storage cooler temperatures will be checked and logged one time per day. Problems will be addressed immediately. Multiple thermometers can be used to assure correct temperature readings. **(4-19) (P-9.8) (§112.124)**

The cooler thermometer will also be calibrated on a monthly basis to ensure a reliable and accurate reading. The calibration will be recorded in the calibration log. Scout for signs of rodents. Before using coolers for the season, check for holes/cracks (check at night with a light on inside cooler and you look at it from the outside to see if any light is visible). Condensation from cooling equipment does not come into contact with produce. This includes preventing product that has been iced from dripping on product that is stored below. **(3-30; 4-20, 4-21, 4-23) (§112.126(b)(2))**

The cooler will also be cleaned on a monthly basis or sooner if needed. This cleaning will be recorded in the log and kept on file for a minimum of two years. **(4-22) (G-3.3) (§112.164)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

If produce is cooled, it is cooled to the appropriate temperatures for the commodity according to established industry practices or regulatory requirements. Temperature control logs for our cooling practices are at the end of this document. **(P-9.7)**

Allergen Control

If applicable, enter your allergen control program here for review by the auditor. **(P-3.6)**

Rodent and Pest Control

Note: Farm operations are inevitably subject to animal and pest infiltration. You must do your best to keep pest problems under control. Special attention will be paid to the processing and storage facility due to the permeability of the structure. If this permeability becomes a pest problem, a plan to deal with the cracks and holes will be developed at that time.

Our farm has a written pest control program, performed by a trained pest control operator (or licensed where required by prevailing regulation). The written program includes the following policies and procedures [ADD PROCEDURES HERE such as storage of outside equipment or other factors dealing with pest harborages, and maps of the location of pest traps outside and inside the operation]. Our farm maintains a pest control log that includes dates of inspection, inspection reports and steps taken to eliminate any problems. Applications of pesticides (e.g., insecticides, rodenticides) are performed in compliance with local, state, and federal pesticide regulations. **(P-4.1)**

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. [SEE PEST RECORDKEEPING SHEET]. We NEVER use bait inside the packinghouse. **(3-31, 3-32; 4-14, 4-15) (P-4.3)**

All walls, doors, and windows are inspected. All windows are screened. Any holes are repaired to prevent pest entrance into the operation. **(3-30, 3-33; 4-13, 4-16) (§112.128)**

Equipment stored outside is stored away from the building perimeter. Equipment is not allowed to accumulate near the building. Old, unused equipment (bone yards) are located away from the building. Outside equipment storage areas are included in our pest control program. **(P-3.5)**

Employees are trained to report any signs of infestation in the field or processing and storage areas. Storage rooms, areas for boxes, coolers, and sheds, where packing is done, and other locations where produce is kept until picked up, are inspected and kept free from rodents and birds.

Note: If you hire an exterminator/outside pest control company, they should monitor the facilities on a monthly basis or more often. All traps should be checked and documented daily by the farm personnel. A service report from the exterminating company will be provided or updated monthly. If a change in conditions develops, the monitoring company should be contacted immediately.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Washing and Packing Line

Water sources and the operations they serve are documented.

Note: The description shall include one or more of the following: maps, photographs, drawings (hand drawings are acceptable) or other means to communicate the location of water source(s), permanent fixtures and the flow of the water system (including holding systems, reservoirs or any water captured for re-use). Permanent fixtures include wells, gates, reservoirs, valves, returns, backflow prevention and other above ground features that make up a complete water distribution system shall be documented in such a manner as to enable location in the Operation. **(P-7.1)**

The water delivery system is maintained so as not to serve as a source of contamination of produce, water supplies, or equipment with pathogens, or to create an unsanitary condition. Water installations and equipment are constructed and maintained to prevent backflow and cross connections between product contact water and waste water. Routine checks verify that backflow prevention units are functioning properly (annual or as needed to maintain continuous protection). Results are documented. **(P-7.2)**

All water used in postharvest handling including washing and cooling water or water used for ice production is potable. **(3-3, 3-10, 4-17) (F-10.2, P-7.3)**

Source water used in the packing of fresh fruits and vegetables, either for washing produce or as a way to apply waxes, MUST be potable. Copies of the municipal water test results are obtained yearly and kept with the water records. Farm wells should be tested at least once a year to determine potability. Some audits may require wells to be tested more often, such as quarterly. Surface water (ponds, lakes, streams, etc.) are not considered potable for a packinghouse and cannot be used.

If the operation includes a washing process for produce, an initial risk assessment must be performed that takes into consideration:

- Commodity
- Type of wash system
- Type of sanitizer
- Water quality

(P-7.4)

Washing, grading, sorting, packing lines, and food contact surfaces are cleaned and sanitized according to our company's SOPs including the removal of debris and damaged produce. **(3-6, 3-8) (P-6.5, P-7.11) (§§112.48(b), 112.123(d)(1), and 112.140(b)(2))** Product flow zones are protected from sources of contamination. **(3-9)**

A thorough cleaning will happen on a weekly basis or as needed and this will be recorded on the Cleaning Log. Cleaning and sanitizing procedures do not pose a risk of contaminating product.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Sanitizers and Antimicrobial Treatments

If a wash water antimicrobial product (i.e., sanitizer) is used, it should have a regulatory registration number and be labeled for use on produce (EPA, FDA approved documents/labels). The antimicrobial is used according to the manufacturer's instructions. **(3-5) (P-7.7, P-7.8)**

Note: When antimicrobial products are used in postharvest water, the concentration and contact time allowed will be listed on the label. Concentrations may vary by product used, so always follow the label.

Antimicrobial treatments must be sufficiently monitored to assure continuous control. SOPs and records are located at the end of this document. **(3-7) (P-7.5) (§§112.43(b) and 112.50(b)(4))**

Any instruments used to measure temperature, pH, antimicrobial levels, or other critical measurements for water quality are properly calibrated at [ENTER FREQUENCY HERE] to assure continuous accuracy**. (P-5.4) (§112.124)**

Temperature

The temperature of the water in dump tanks, flumes, sinks, basins, etc. is monitored hourly either automatically or with a standard thermometer at the same time as the disinfectant concentration is measured. The water temperature is not more than 10 degrees Fahrenheit cooler than the produce. **(3-4) (F-10.5, P-7.9) (§112.48(c))**

Use a thermometer to test pulp/core temperatures for accurate temperatures when washing produce in the "dump 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 temperature.

Sorting might be a valuable step to add to visually inspect produce for cuts, blemishes, or signs of wildlife damage that can increase susceptibility to water infiltration.

Maintaining Wash Water Quality

- Dump tank water is changed [INSERT HOW OFTEN HERE] and disinfectant levels are maintained at [INSERT LEVEL HERE]. **(3-5) (P-7.10) (§112.48(a))**

  Multi-sinks or other small communal washing basins are essentially the same as dump tanks. The benefit is that the water is usually changed more often (document this) and you have better control of the material that enters the basin (can pre-rinse with single pass water to remove leaves and field dirt) so you can use less disinfectant if the microbial and organic load is lower.

  See list of OMRI approved sanitizers.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Follow label directions (include a copy with the SOP). If you have a poor monitoring system, then more frequent water changes will be necessary. Describe how this is done in your plan.

Cleaning and Sanitizing

- Cleaning and sanitizing water-contact surfaces including dump tanks, flumes, and wash basins is done [INSERT HOW OFTEN HERE].
  Food contact surfaces are in good condition and cleaned and sanitized [HOW OFTEN].
  Backflow devices are installed and air gaps present to prevent contamination of clean water.
  Equipment is designed, inspected, and maintained to assist in maintaining water quality.

  (This includes surfaces that can be sanitized; wood cannot be sanitized. Equipment that allows for the collection of debris (visible or invisible) must be redesigned to eliminate the potential risk and allow for proper cleaning. Periodic water sampling and microbial testing could be added to ensure that the system is functioning properly.)

- Recirculated water that contacts produce is treated with approved sanitizers to prevent cross-contamination. **(F-10.3; P-7.6)**

Ice Management

Ice machines are sanitized on a regular schedule. **(4-18) (§112.123(d)(1))** If ice is purchased, a copy of the sanitation log for the ice machine and water quality tests for ice production are attached with the water log. All ice hauled to a separate location is transported in a closed truck or in covered bins. No ice will be transported in wooden containers. **(3-11)**

Note: Ice or cold water (hydrocooling) is often used to reduce the temperature of a product. Water used for this purpose must be potable in order to reduce the risk of contamination. If using farm well water, the well should be tested twice a year and have no presence of fecal coliforms and generic *E. coli*. Ice making facilities must be cleaned and sanitized on a regular schedule.

Vehicles for Produce Transportation to Market

All vehicles used to transport produce to market are inspected prior to loading. If the vehicle is found to be unsanitary, it will be cleaned and sanitized prior to use. Equipment used to carry animal products or other potentially hazardous items including carcasses, manure, or pesticides will not be used. Contracted truck operators are asked to state the last load that was hauled in the vehicle and all information is recorded in the transportation logs. **(4-24, 4-25)** Contracted vehicles will provide a cleaning schedule and temperature log for the vehicle prior to loading. Our company has a written policy that specifies temperatures that must be maintained by trucks hauling produce from our farm. **(4-26)**

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk

Special consideration/SOPs should be developed for operations that have only one truck that transports pesticides, farm pets, and fresh produce. A simple SOP that includes cleaning before transporting fresh produce will suffice.

Delivery trucks and vehicles will be inspected for odors and visually inspected for signs of unsanitary transport conditions. Equipment will be cleaned and sanitized (if necessary) before produce is loaded. [ENTER POLICIES AND PROCEDURES HERE]. **(4-24) (P-10.5) (§112.125)**

Invoices and shipment manifests will be kept on file for at least two years.

When refrigerated transport is required, a written policy for transporters to maintain a specified temperature during transit is established. **(P-10.1)**

In addition, refrigerated transportation must:

- Follow pre-cooling procedures from a documented protocol **(P-10.2)**
- Have properly maintained and serviced refrigeration equipment **(P-10.3)**
- A method for recording product temperatures before or upon loading **(P-10.4)**

Produce is loaded carefully so that risk of damage will be minimized. Only employees who are trained in loading produce from the storage cooler and onto trucks will be allowed to do so. **(4-27) (P-10.6)**

Records are kept recording the source of incoming product and the destination of outgoing product which is uniquely identified to enable traceability. (3-34, 4-31)

Bioterrorism & Pesticide Usage Considerations

Note: There are no audit provisions in this section. It is provided in case you have these issues on your farm. If not, delete it for your plan. Some growers accidentally registered their farms for this Act and will need to request their farm be removed from the list. This Act was created to improve the ability of the United States to prevent, prepare for, and respond to bioterrorism and other public health emergencies.

Public Health, Security, and Bioterrorism Preparedness and Response Act of 2002

[Name Here] is aware of the Act and understands how his/her operation is affected. [Name] Farm qualifies as a food production facility and has been registered under the Act. Employees will notify [Name Here] immediately if they observe suspicious persons, vehicles, or packages around the farm.

National GAPs Program at Cornell University © 2019
Template developed by: E.A. Bihn, R.G. Hadad, C.J. Kahlke, G.L. Wall, and C.L. Fisk