

California Small Farm Food Safety Guide: Standard Operating Procedures for Good Agricultural Practices*

**Jennifer Sowerwine
Mary Vincent
Richard Molinar
Chuck Ingels
Christy Getz
Erica Chernoh
Jenny Broome
Debbie Thompson**

**University of California
Division of Agriculture and Natural Resources**

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***This Food Safety Guide provides a comprehensive yet concise description of Standard Operating Procedures for Good Agricultural Practices on Small Farms and associated worker training and documentation. It can be used as a reference when developing your own On-Farm Food Safety Plan. The content aligns with requirements outlined in the USDA Good Agricultural Practices (GAPs) and Good Handling Practices (GHPs) Audit Verification Program and was reviewed by Trevor Suslow, UC Food Safety Research Specialist. Please contact Jennifer Sowerwine jsowerwi@berkeley.edu or Christy Getz cgetz@berkeley.edu for more information.**

Table of Contents

I.	General Conditions.....	3
	A. Contact information & farm description.....	3
	B. Traceability.....	4
	C. Worker health and hygiene.....	5
	D. General sanitation.....	7
	E. Chemicals and pesticides.....	7
II.	Farm Review.....	10
	A. Water Assessment.....	10
	B. Domestic animals, wildlife and livestock.....	11
	C. Manure and biosolids.....	11
	D. Land assessment and soils.....	11
III.	Field Harvest and Field Packing.....	12
	A. Field worker sanitation and hygiene.....	12
	B. Pre-harvest assessment.....	12
	C. Field harvesting equipment.....	13
IV.	Packing House Facility.....	13
	A. Receiving.....	13
	B. Washing/packing.....	13
	C. General Sanitation.....	14
V.	Storage and Transportation.....	15
	A. Product, containers, pallets.....	15
	B. Pest control.....	15
	C. Emergency response.....	15
IV.	References & Contact Information.....	16
IV.	Documentation/record keeping.....	18
	a. Fertilizer Input Use Record.....	18
	b. Pesticide Use Report.....	19
	c. Toilet & Handwashing Maintenance Record.....	20
	d. Pre-Harvest Assessment & Farm Cleaning Record.....	21
	e. Worker Training and Instruction Record.....	22
	f. Traceback Record.....	23
	g. Pest/Rodent/Wildlife Control Record.....	24
	h. Injury/Illness Reporting Record.....	25
	i. Contamination Response Record.....	26
	j. Mock Recall Record.....	27
	k. Visitor Log.....	28

I. GENERAL CONDITIONS

A. CONTACT INFORMATION/FARM DESCRIPTION

**Standard Operating Procedures for Good Agricultural Practices (GAP's)
At**

Farm Name: _____

Contact Person: _____
Farm Location (s): _____ _____
Mailing Address: _____
Phone: _____ Email Address: _____
Legal Description of Location (s): (if available, section, township, range); cross streets, city _____
Total acres farmed (at each location): _____
Crops grown: _____

Food safety is an integral part of our entire operation and is taken very seriously.

_____ (Farm Owner/Manager) has been designated to oversee and implement our food safety program for our farm and has participated in GAP & GHP training. In the absence of the farm owner/manager _____ is responsible.

This food safety program includes a set of on-farm policies and standard operating procedures (SOP), worker training programs, and record-keeping sheets which address several areas of our agricultural operation, including traceback procedures, worker health and hygiene, irrigation water, soil management, pesticide use, transportation and equipment. Any personnel violating food safety policies and procedures will receive disciplinary action on a timely basis.

A map of our farm(s) identifying coded fields, structures, water source, and chemical storage sites, is attached. Our food safety plan is reviewed annually and revised as necessary and we complete self-audits annually.

B. TRACEBACK AND RECALL POLICY AND PROCEDURES

Our farm has a documented traceback program with established traceability standard operating procedures that include IRQ box labels, invoicing & record keeping. Our program enables all product to be traced back to the production area and date harvested.

SOP: IRQ/Traceback Labels

All boxes destined for wholesalers/retailers will be labeled with IRQ information:

- **I = Identity:** What is in the box: The common name of the commodity in package.
- **R = Responsible Party:** The name and address (county is sufficient) of individual (or company) responsible for packing the product .
- **Q = Quantity:** amount in box, weight or count
- **D = Date** of harvest/packing

Invoice: All sales transactions beyond the farm stand are documented with invoices. Information recorded in the invoice is found in the textbox below.

SOP: Invoice Content

- Name of Farm & contact information (Get pre-printed book or use custom stamp)
- Responsible party (who packed the product)
- Date of transaction
- Identity of product
- Quantity of product (amount in box, weight or count)
- Price
- To whom the product is sold/shipped.

Documentation: No. 6 Traceback Record

In combination with the invoice, a detailed traceback log (No. 5 Traceback Record) tracks all sales beyond the farm stand. Information includes the name of operation, date harvested, production area harvested, date shipped, crop, # boxes, picked up/delivered by, sent to and total price. Either or both of these modes of documentation provide necessary traceback information.

Procedures for a Mock Recall: In preparation for an audit, when selling product beyond the farm stand, our farm will conduct a mock recall to be implemented during the second year. We will work with our customers (wholesale, retail) to track the path the product takes from the farm to the consumer. We will have documented evidence of completing at least one mock recall within 12 months prior to an audit. We will use the following standard operating procedures:

SOP: Mock Recall Plan

1. Farm communicates with customers that they are preparing a mock recall.
2. Farm owner selects date for mock recall.
3. Farmer documents:
 - a. total number of cases packed on chosen recall date from a particular production area or farm.
 - b. how much product and to whom it was shipped (eg. 300 cases to 3 wholesaler)
4. Farmer initiates recall
 - a. Contact all customers who received product from the lot harvested on specified date and location.
 - b. Forward a form to each customer asking them to supply an accounting of the number of cartons from that lot still in their possession and the number of cartons sold and/or destroyed. The form will contain instructions on what to do with remaining product and required proof of disposal, where to send the form when completed and timeframe when it must be sent back.
5. Farmer summarizes the forms from the customers and determines the number of cartons still in the retailers' control and the number that are not.

Documentation will include:

- Total number of cases packed on a particular date, the customers contacted, the amount of product originally shipped, the amount of product remaining from original shipment and disposition of product which could not be effectively recalled (or returned). Such as sales to customers, reshipment to a subsequent customer that could be contacted if a recall were necessary, or destruction of product.

Documentation: No. 10 Mock Recall Record

C. WORKER HEALTH AND HYGIENE POLICY AND PROCEDURES

Worker Health and Hygiene

Worker Training: All visitors, employees or workers are trained in and must follow good hygiene practices. The training takes place during orientation for new employees and before harvest season for all returning employees or workers and is documented. All visitors are required to sign in and abide by farm healthy and hygiene policies outlined above. See text box for content of training.

Signage: Signs are posted to instruct workers and visitors to wash hands before and after handling food, harvesting, eating and smoking. Signs demonstrating how to wash hands (with soap and water after using toilet) are posted in toilet area. Designated areas for smoking and eating lunch are established away from harvest and packing/sorting area.

Clean, Potable Drinking Water: is available, renewed daily, and water source documented.

Personal Protective Equipment: PPE is cleaned after each use to prevent contamination in the home and at work.

Worker Training 1: Health and Hygiene

Proper Hand Washing: Hands must be washed before beginning or returning to work and after the following activities: using the restroom, smoking or tobacco use, taking breaks, handling trash containers or disposing of trash, using the telephone, handling money, coughing and sneezing. Hands are washed with soap for 20 seconds and dried with disposable towels. Water is turned off with disposable towel. Towels are deposited in a covered receptacle. Hands are dried before putting on gloves.

Personal Hygiene: All workers must follow good hygiene/sanitation practices including:

- Wear clean work clothes
- Take a daily shower
- Not wear dangling strings or jewelry including rings and necklaces
- Keep all glass containers away from the field
- Wear clean, un-ripped, sanitary gloves (best are non latex)
- Not take gloves into lunch room or restroom
- Not use product containers for personal use
- Have clean and cut nails
- Eat and smoke in designated area
- Use only clean, non-ripped gloves
- Tie back long hair

Documentation: No. 5 Worker Training Record

Illness and Accident Prevention and Response

Training to all workers in illness prevention is provided and documented. See the following text box for content.

Worker Training 2: Bleeding / Bodily Fluids and Illness Policy

- To avoid heat exhaustion, drink lots of water frequently (2 quarts per person/day) especially when hot.
- Access to shade (umbrella or other shade) is provided close by. Take breaks in the shade.
- Any worker who is ill or appears to be ill with diarrheal or other infectious disease will be sent home or assigned work away from crop production areas and harvested produce.
- Workers who get a cut or have a nosebleed while working must stop immediately, contact your supervisor and have it treated. The wound is cleaned, disinfected, bandaged and gloved as soon as possible. Any product that is contaminated with bodily fluids is discarded immediately away from the field. Any container, surface, or tools that are contaminated are disinfected as soon as possible.
- All accidents and responses are recorded (Record Sheet #8).
- All workers know the location of the first aid kit.

Documentation: No. 5 Worker Training Record

An updated First Aid Kit with bandages, antiseptic solution, antibacterial ointment, and non-latex gloves is located on site at all times. All workers are aware of the location of first aid supplies and what steps they should take should an injury occur.

D. GENERAL SANITATION

Hand Washing Facilities: Good sanitation and proper use of hand washing facilities includes the following:

SOP: Hand Washing Facilities

- Handwashing facility is located in close proximity of toilet.
- All handwashing facilities are clean and water source is covered. They are supplied with single use towels, hand soap and potable water for hand washing. Trash can with lid is located in vicinity and emptied regularly.
- Disposal of waste water from hand washing does not cause unsanitary conditions, nuisance or contamination.
- Hand washing container is thoroughly cleaned and sanitized on a weekly basis by scrubbing with a clearly labeled brush that is stored separately.
- Cleaning and resupply records are maintained.

Documentation: No. 3 Toilet & Handwashing Maintenance Record

Restroom Facilities: Good sanitation and proper use of toilet facilities includes the following:

SOP Restrooms Facilities

- Toilet facilities are located within ¼ mile or 5 min walk of workers.
- Field toilets are properly screened to keep animals and insects out. They are ventilated and provided with self-closing doors, lockable from the inside.
- Daily spot checks for cleanliness & spot cleaning/trash pick up.
- Weekly thorough cleaning (toilet, walls, floors) with Green Power (20 parts water to 1 part Green Power) or equivalent & rinse with hose.
- Sanitize toilets and urinals with a separate, labeled brush.
- Sanitize doorknobs, and any other surface inside unit with separate brush.
- Fill paper products and soap dispensers.
- Provide covered trash receptacle & remove trash to dumpster as needed.
- Record initials and date of cleaning on record sheet # 2 when unit is serviced. Keep records for 2 years.
- Materials required & labeled "Restroom Use Only": broom & dustpan, brush for wall & floor, brush for toilet & urinal, single use wipe for door knob, labeled bucket, trigger sprayer (for spot cleaning), hose (for rinsing).
- Cleaning and resupply records are maintained.

Documentation: No. 3 Toilet and Handwashing Maintenance Record

E. CHEMICALS AND PESTICIDES

Safe Pesticide Use

Before applying any pesticide, a grower must first obtain an "Operator Identification Number". To use a restricted pesticide, a grower must obtain a "Restricted Material Permit" and become a Private Certified Applicator" by passing a test. (If a grower is hiring a licensed pest control

business to make an application of restricted materials, the grower does not need to become certified. The grower only needs to obtain the Permit.

Before applying any pesticide, all employees must be trained by a qualified person or have a private applicator card, a qualified applicator certificate or a qualified applicator license. Training must be done annually and before any applications are made.

Only pesticides—weed killers, bug killers, etc., that are registered by the State of California and are used according to the label may be applied.

All sources of water used to mix pesticides must be protected by an air-gap separation, or a back flow prevention device such as a “chemigation valve”. (The water source also needs to be protected when putting fertilizer through the drip lines).

All pesticides and empty, rinsed containers must be stored in a locked area that does not present a hazard to persons or property. If storing materials with the words Danger or Warning, the area needs to be posted. Containers must be rinsed out at the time of use and the rinse water applied back to the area that was treated. All equipment also needs to be rinsed at the time of use.

Pesticide Reporting & Record Keeping

Growers are required to keep records of all pesticide applications. Pesticide Use Reports must be filled out and submitted to the Agricultural Commissioner’s office within 10 days of the month following the application. The grower must keep a copy. The appropriate form is called the Production Agriculture Monthly Pesticide Use Report (PR-ENF-017C). It can be found online at: <http://www.cdpr.ca.gov/docs/enforce/prenffrm/enf017c.pdf>.

All pesticide records – permits, Identification numbers, use reports, training records, training programs, etc. must be kept for 2 years (3 years if using carbamates/organophosphates). If any pesticide has been used within the last 30 days, and there are employees on the farm, all of the information (use reports, MSDS, labels, Pesticide Safety Information Series, etc.) must be readily available to all employees.

Pesticide Handler Training

All workers who handle pesticides are trained in the program outlined below. Training is completed before the employee/worker is allowed to handle pesticides, updated regularly to cover any new pesticides, and repeated at least annually thereafter. Materials used in the training may include study guides, pamphlets, pesticide product labeling, Pesticide Safety Information Series leaflets, Material Safety Data Sheets, slides and videos/DVDs. Training records, which include the date of training, the content and materials used, and who provided the training, are kept on site while in use and for two years after use at a central location.

Worker Training 3: Pesticide Handler Training

The training shall cover, for each pesticide or chemically similar group of pesticides to be used:

- How to read and understand the content of pesticide product labeling, Pesticide Safety Information Series leaflets, Material Safety Data Sheets, etc.
- The meaning of information contained in product label (such as precautionary statements about human health hazards, signal word, proper chemical handling including mixing and applying, application rate and how it can be achieved, PHI, REI., PPE) and other precautions of the chemical.
- Routes by which pesticides can enter the body; signs and symptoms of overexposure, emergency first aid for pesticide overexposure and how to obtain emergency medical care
- Routine and emergency decontamination procedures including spill clean up and the need to thoroughly shower with soap and warm water after exposure.
- Appropriate use and sanitation of required personal protective equipment.
- Safety requirements and procedures for handling, transporting, storing and disposing of pesticides (stored in locked area, transported separate from produce,)
- Environmental concerns such as drift, runoff, wildlife hazards.
- Warnings about taking pesticides or pesticide containers home.
- Proper disposal of left-over chemicals and chemical containers. Spray out remaining mixture and rinse sprayer with water; never store left-over mixture for later use. Never re-use containers. Triple rinse, empty, remove lid and puncture container—dispose of containers at approved hazardous material disposal site.

Documentation: No. 5 Worker Training Record

Worker Training 4: Pesticide Worker Safety

All employees who work in a field treated with pesticides has been trained within the last 5 years, in a manner the employee understands, before beginning work in the treated field. The training will include:

- The importance of routine decontamination and washing thoroughly after the exposure period.
- Restricted entry intervals and what posting means (both California and federal posting sign formats)
- Where pesticides are encountered, including treated surfaces in the field, residue on clothing, chemigation and drift.
- Routes of exposure
- Hazards of pesticides including acute effects, chronic and delayed effects, and sensitization effects.
- Common signs and symptoms of overexposure
- First aid including decontamination, eye flushing, and obtaining emergency medical care
- Warnings about taking pesticides or pesticide containers home
- The hazard communication program requirements of section 6761
- Employee rights as outlined in section 6764 of the California code of regulations

Documentation: No. 5 Worker Training Record

II. FARM REVIEW/POLICIES AND PROCEDURES

A. WATER ASSESSMENT

The source of irrigation water is *PRIVATE WELL/MUNICIPAL WATER* (circle one) or _____. Crops are irrigated by *DRIP IRRIGATION, FURROW, SPRINKLER* or _____.

Water Risk Assessment: Water quality is known to be adequate for the crop irrigation method and this is shown by water test results from a GLP lab in this food safety program.

All water sources are tested for the presence of an indicator organism(s) that may signal the presence of pathogens. Indicator organisms (such as Total Coliform and *E. coli*) are not used specifically to predict the *presence* of pathogens, but are useful *predictors* of undesirable conditions (e.g., ineffective treatment, defective manufacturing process, presence of fecal material). Annual water tests for **Total Coliform and Fecal Coliform/*E. coli*** (requires an analysis of two 100 ml samples at 35C and 42-44.5C, respectively) at the beginning of the season are conducted for wells, bore-holes, spring-boxes, water-tower, rainwater cisterns. If water source is open (reservoir, pond, stream, creek, river, tailwater return (field runoff), or sedimentation pond water), water tests for **Generic *E. coli*** are collected every three months. When using municipal water, annual public tests conducted by irrigation districts, municipal authorities, etc. are accepted (and reports are attached to F.S. Manual). Renters will need to request a report from the water district. Water test results for all water sources, including for irrigation, human consumption and postharvest application are available for review.

SOP Collecting Water Sample

- Sterile sample containers are obtained from testing laboratory.
- If water is collected from tap, water should run for 2-3 minutes before the sample is taken.
- The tap should be cleaned with sodium hypochlorite (bleach) prior to collecting the sample; let water run for an additional 2-3 minutes before collecting sample.
- Sample should be analyzed as soon as possible and no more than 30 hrs after collection.
- Samples should be kept cool (in an iced cooler) during transport.
- Water is tested for total coliform & will be treated according to industry standards.
- Testing for additional contaminants (heavy metals, nitrogen, protozoa, salmonella) should be conducted if risk is evident.

Documentation: Water analysis attached

If water test results exceed the recommended Action Threshold for this operation, corrective action will be taken. While no federal or state regulatory standards for irrigation water exist, based on surveys within California, current recommendations follow a guidance level of 1000 fecal coliform or 126 generic *E. coli* per 100 ml of water as an Action Threshold. Although there is currently no established correlation of these levels to the presence of true pathogens in irrigation water, if this level is exceeded appropriate chlorination will be started.

If necessary, steps are taken to protect irrigation water from potential contamination. All irrigation sources are inspected for unauthorized use or potential contamination with microbial

infection, chemicals or other dangerous substances. **There is no municipal/commercial sewage treatment facility or waste material landfill adjacent to the farm.**

B. DOMESTIC ANIMALS, WILDLIFE AND LIVESTOCK

If crop production areas are located near or adjacent to manure lagoons, or dairy or livestock facilities appropriate action such as building berms, ditches or fencing are constructed to avoid contamination as a result of flooding or animal movement..

Surface water resources are protected from livestock contamination by FENCING, DRAINAGE CANAL *or* _____. Domestic animals (including dogs) will be excluded from crop production areas during the growing and harvesting season.

All fields are routinely monitored and recorded for unauthorized entry of wildlife or neighboring domesticated animals to the fields. In the event that unauthorized entry is discovered, the operation will take steps to minimize the risks of potentially contaminated product or production areas, and the detected risk and corrective actions are documented.

C. MANURE AND MUNICIPAL BIOSOLIDS

At our farm operation:

NO MANURE or municipal biosolids of any kind are used as a soil amendment.

RAW MANURE or a combination of raw and composted manure is used as a soil amendment. When raw manure is applied, it is incorporated at least 2 weeks prior to planting or a minimum of 9 months prior to harvest. Raw manure is not used on commodities that are harvested within 9 months of planting. If a combination of raw and treated manure is used, the treated manure is properly treated, composted or exposed to reduce the expected levels of pathogens. Untreated manure is properly stored prior to use. Our source of raw manure is from _____.

Only COMPOSTED MANURE and/or treated biosolids are used as a soil amendment. Composted manure and/or treated biosolids are properly treated, composted, or exposed to environmental conditions that would lower the expected level of pathogens. Composted manure and/or treated biosolids are properly stored and are protected to minimize recontamination. Analysis reports are available for composted manure/treated biosolids. Our source of composted manure and/or treated biosolids is _____ (Name of Compost Company). Please find the treatment documentation from the company attached herein. **A manure application log is attached to this food safety plan that documents all applications, their treatment method and any supporting documentation.**

D. LAND ASSESSMENT AND SOIL

Land Risk Assessment: There are no known sites on the farm that may have a risk of prior contamination (such as former dumpsites, old homesteads, barn sites, and livestock pens). I have

farmed this land for the last ____ years and prior to that the land was fallow / farmed (circle one)
<If there is a risk, then provide the following information>

There are several sites on the facility that may have a risk of prior contamination. These fields are shown on the enclosed map and those with possible contamination risk have been tested for _____. Please see attached map and testing results for a comprehensive review of soil contamination risk and planting plans.

During the past 3 YEARS, **no** domestic sewage, sewage sludge, septic waste, portable toilet waste, or other product that might contain human feces has been placed on or adjacent to any crop production areas. If it has occurred, affected areas are mapped and soil test results contained herein.

During the past 3 YEARS, **no** flooding from creeks or rivers has occurred on any part of the land, nor have any adjacent domestic septic tank systems flooded onto the field. If flooding has occurred, areas affected are documented with maps and soil test results are contained herein.

III. FIELD HARVEST AND FIELD PACKING POLICY AND PROCEDURES

A. FIELD WORKER SANITATION AND HYGIENE

No smoking, tobacco use, or eating should take place around crop production areas or harvested produce. Food, drinks, and smoking are only allowed in the designated location. That location is _____.

There is one male and one female toilet for every twenty workers that is located within a 1/4 mile or 5-minute walk, and all other OSHA regulations are complied with. For fewer than 5 employees, only 1 field sanitation unit is required but the toilet must be lockable from the inside. All workers and visitors must follow proper health and hygiene practices and use the restroom and hand washing facilities provided. If restroom facilities are not properly maintained, any employee or visitor should notify the onsite supervisor.

Field sanitation units are directly accessible for servicing and in the event of a spill or major leak, a response plan is in place. The area will be secured and contaminated soil will be removed from the production area and properly disposed. These accidents and responses will be documented.

B. PRE-HARVEST ASSESSMENT

Prior to harvesting any crop, the farm operation will complete a pre-harvest assessment on each production area to address known risks that are applicable to the operation. The assessment will determine:

- Are toilet and wash facilities properly located?
- Are all workers trained in GAPs?
- Is potable water and shade available to all workers?
- Are harvest containers available, clean, well located and protected?
- Is harvest, washing and packing equipment clean, sanitized and in good condition?

- Are shade or other pre-cool measures in place?
- Is there evidence of animal feces, dead animals, animal crop damage or other physical contamination in the crop area that needs to be isolated for “no-harvest”?
- Are there other notable sources of contamination such as dump sites, fuels or chemicals, manure, burning debris, or water runoff that may affect food safety?
- Is transportation equipment clean and available with protective covering?

C. FIELD HARVESTING EQUIPMENT

All harvesting equipment is cleaned and washed during harvest season on a daily basis and recorded following our SOP below:

SOP Cleaning Harvest Equipment

Step 1: Place harvest containers next to sanitized surface (plastic) that has been pre-rinsed, scrubbed with detergent, rinsed & sanitized (see solution below).

Step 2: All buckets will be pre-rinsed, using scraping, brushing and hosing to remove any visible soil.

Step 3: Buckets will be scrubbed with detergent and rinsed.

Step 4: **Sanitizing solution (1 tablespoon pure unscented bleach (5.25%) to 1 gallon water=150ppm)** is poured into sanitation tub. Buckets are dipped in sanitizer and then air-dried and stacked in sanitary storage.

Step 5: Check water with chlorine test strips to determine when to change water. Waste-water will be disposed of daily away from production area with proper drainage.

All brushes & tubs are labeled for “Harvest Equipment Only” and stored separately. Workers will use proper protective gear (water proof aprons, rubber gloves, goggles).

Documentation: No. 4 Farm Cleaning Record

During harvest, equipment will be as clean as practical, maintained to prevent contamination from leaking oil, grease, loose parts, and any other source of foreign material contamination. If equipment does become contaminated with oil, grease, or any other foreign substance, all contaminated product will be disposed of, buried, or put into covered garbage containers and work will stop until equipment can be cleaned, washed and inspected.

Measures are taken during harvest to inspect for and remove foreign objects such as glass, metal, rocks, dead animals or other dangerous/toxic items that can contaminate the product.

If any glass is broken and contaminates product, all product will be properly disposed of, work will stop until equipment is repaired and all product containers cleaned, washed and inspected.

IV. PACKING HOUSE/SHED/FACILITY

A. RECEIVING

All product is properly handled, stored, and moved to protect and reduce possible contamination.

B. WASHING/PACKING

For any crop that requires post-harvest washing, water used in the washing/packing operation is potable. Wash tanks, tubs and food contact surfaces are cleaned/sanitized regularly following a pre-rinse, wash, rinse & sanitizing protocol as outlined above. Chlorine use keeps microbial content in the water down to prevent the potential for cross contamination of all produce in the washing system, **it will not sterilize the produce.**

Our farm practices the following SOP for post-harvest washing.

SOP Cleaning Produce

- All water, which comes in contact with produce for washing is tested and is safe to drink.
- If using chlorine (sodium hypochlorite), water should contain between 5 and 10 parts per million (ppm) total chlorine. **1/2 Teaspoon pure unscented bleach (5.25%) in 6 gallons of water = 5 ppm** Use chlorine test strips to determine chlorine content.
- For chlorine to be effective, water should have a pH of between 6 and 7.5 with minimal organic matter (soil) in the water. Use pH test strips to determine pH.
- Water is changed in the dump tanks daily or when pH, chlorine content or organic matter makes chlorine ineffective.
- To minimize chlorine residue, rinse produce with potable water only prior to packaging

C. GENERAL SANITATION

There is a pest/rodent control program for the packing shed/farm stand:

SOP Pest Control in farm stand/packing shed and storage area

- Take measures to prevent rodents from entering farm stand and storage area.
 - Remove all potential food sources and nesting sites from inside and around the storage area and farm stand.
 - Seal off entry points with screens, barriers.
 - Store empty boxes off the ground and covered in plastic (wrapped).
- Best to trap rodents between winter and spring.
- Monitor for rodent presence (droppings, sightings)—keep records.
- Place mechanical (snap) or sticky traps inside where there is evidence of rodents. **Do not use bait traps inside farm stand or packing shed.**
- Monitor traps regularly and record effects.
- Dispose of trapped animal immediately and document effects.

Documentation: No. 7 Pest/Rodent/Wildlife Control Record

Traps or other non-poison methods should be the only control program located within a structure. **All bait stations containing poison must be located outside the facility.** Poison bait stations pose a risk to wildlife, cats, and other farm animals and should be used secondary to mechanical (snap or sticky) traps. Poisoned rodents, may be eaten by a hawk or owl and intern poison the predator. Traps or bait stations that work to keep the rodent inside of the trap can be helpful in reducing the chances of poisoning predators. Birds of prey are beneficial in reducing populations of rodents. Many organic growers build owl or hawk nests and perches along field borders to encourage their presence. Traps and bait stations are regularly checked and have

documentation showing when this was completed. A pest control log is maintained that includes inspection dates, inspection reports, and procedures implemented to eliminate any problems (record sheet # 6). Frequent monitoring of affected and treated areas must take place to determine the effectiveness of the treatment applied. Generally, all traps and bait stations will be marked and flagged by numbers or some type of coding system. It is likely that there will also be a map of the premises that shows the location of such traps and bait stations.

Flies: Fly strips will be installed, monitored and changed regularly to minimize presence of flies in the produce packing, storage and sales area.

V. STORAGE AND TRANSPORTATION

A. STORAGE

All empty packing containers, (trays, baskets and boxes) are stored off the ground and protected/covered from contamination.

SOP Cleaning Farm Stand/Packing Shed/Storage Facility

- Storage facilities are cleaned regularly, prior to loading with product and records maintained.
- Materials used include a broom, dustpan, and trigger spray bottle with clean rags.
- Cleaning includes removal of all spider webs, dust and debris from the floor, shelves and ledges. All potential nest sites or food sources for rodents are removed.
- Spot cleaning is conducted as needed. Trashcans are emptied.
- All cleaning materials will be labeled & stored separately.

Documentation: No. 4 Farm Cleaning Record

B. TRANSPORTATION

Vehicles transporting product have not been previously used to haul domestic sewage, manure, or hazardous material. Vehicles are clean and in good working condition, prior to loading and on a regular basis Transport vehicles (trucks) are inspected and cleaned regularly by sweeping out debris followed by hosing down and recorded.

- Produce items are not loaded with any potentially contaminating products or chemicals.
- Produce is kept as cool as possible following harvest and in transit.
- Produce is loaded and transported so as to minimize physical damage.
- Product is covered from the field to packing/storage site and from packing site to market.

C. EMERGENCY RESPONSE PLAN/MAP

Our farm is prepared in case of an emergency spill, leak or other hazardous material event. Our farm safety map indicates fuel and chemical storage sites.

SOP Emergency Response Plan

If an emergency spill or leak should happen, immediately stop all other activities and,

- Stop the initial spill or leak at its source
- Make necessary phone calls to notify officials and obtain assistance, equipment and supplies.
- Contain spill or leak and prevent materials from contaminating water sources.
- Contact company that can aid in containing and removing contaminated material. Action includes using soil to divert flows, remove contaminated soils.

Documentation: No. 9. Contamination Response Record

- This document was prepared by UC Berkeley, UC Cooperative Extension Sacramento, UC Cooperative Extension Fresno, and the Community Alliance with Family Farm's Growers Collaborative with support from the National Research Initiative of the National Institute of Food and Agriculture, USDA, Grant # 2009-5561805065.
- ** The Pesticide Use & Reporting Protocol is based on California laws and standards; there may be different requirements for other states.

REFERENCES

- California Leafy Greens Product Handler Marketing Agreement;
<http://www.caleafygreens.ca.gov>
- California OSHA Guide to Developing Your Workplace Injury and Illness Prevention Program with Checklists for Self-inspection;
http://www.dir.ca.gov/dosh/dosh_publications/iipp.html
- California Strawberry Commission Food Safety Program (2006).
- Cornell University's Dept. of Food Science: National GAPs Educational Materials:
<http://www.gaps.cornell.edu/educationalmaterials.html>
- EPA Office of Prevention, Pesticides, and Toxic Substances: How To Comply with the Worker Protection Standard for Agricultural Pesticides: What Employers Need to Know;
http://www.epa.gov/oecaagct/epa-735-b-05-002_AppA.pdf
- Food Safety Begins on the Farm: A Grower's Guide. By A. Rangarajan, E.A. Bihn, RB. Gravani, D.L. Scott, M.P. Pritts, 2000. Cornell GAPs Program, Cornell University Dept. of Food Science.
- Good Agricultural Practices: A Self-Audit for Growers and Handlers:
ucce.ucdavis.edu/files/filelibrary/5453/4362.pdf
- Oregon Dept. of Agriculture Farm Safety Manual;
http://www.oregon.gov/ODA/ADMD/docs/pdf/gap_safety_program.pdf
- Oregon Dept. of Agriculture Good Agricultural Practices Manual:
http://www.oregon.gov/ODA/ADMD/docs/pdf/gap_full_0210.pdf
- Penn State University Dept of Food Science – USDA Auditor Guidance November 2009 :
<http://foodsafety.psu.edu/gaps/>
- US Food and Drug Administration: Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables
- USDA Good Agricultural Practices & Good Handling Practices Audit Verification Checklist;
<http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5050869>

Contacts for More Information

Jennifer Sowerwine, PhD

Sustainable Food System Specialist
UC Berkeley
137 Mulford Hall-MC:3114
Berkeley, Ca. 94720
510-528-8843
email: jsowerwi@berkeley.edu

Christy Getz, PhD

Associate Cooperative Extension Specialist
Department of Environmental Science, Policy
and Management
207 Giannini Hall
Berkeley, CA. 94720
510-642-8681
cgetz@berkeley.edu

Richard H. Molinar, MS

Farm Advisor, Small Farms/Specialty Crops
UC Cooperative Extension **Fresno**
1720 S. Maple Ave., Fresno, CA 93702
Phone: 559-456-7555
Email: rhmolinar@ucdavis.edu
useful web sites: www.sfc.ucdavis.edu
<http://vric.ucdavis.edu>
<http://cefresno.ucdavis.edu>

Michael Yang

UC Cooperative Extension **Fresno**
Small Farms and Specialty Crops Program
1720 S. Maple Ave
Fresno, CA 93702
Phone: 559-456-7189
Fax: 559-456-7575
Email: myang@ucdavis.edu
Web:
<http://cefresno.ucdavis.edu/agriculture/>

Chuck Ingels, MS

Farm Adviser
UC Cooperative Extension **Sacramento**
4145 Branch Center Rd.
Sacramento, CA 95827-3823
Office: (916) 875-6913
Direct line: (916) 875-6527
Cell: (916) 835-7458
Email: caingels@ucdavis.edu

Debbie Thompson

Deputy Agriculture Commissioner-
Sacramento County
520 N. Lincoln Way, Ste. 3
Galt, Ca. 95632
Phone: 209-745-4109