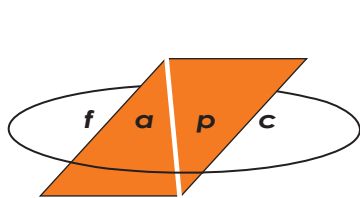


Robert M. Kerr Food & Agricultural Products Center



FOOD TECHNOLOGY FACT SHEET

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Fresh Produce Production Food Safety Plan Logs and Worksheets

William McGlynn

FAPC Horticultural Products Processing Specialist

The following worksheets are intended to serve as templates to cover most of the documentation and record keeping that will occur as part of a typical fresh produce food safety program. Not every size and type of operation will need to use every sheet, but most operations will want to capture and record most of the information these sheets are designed to document. It is expected these sheets will serve as a foundation and inspiration for further customization. For example, some operations may find it beneficial to create separate log sheets to document the cleaning and sanitation of different types of equipment or different areas within a packing facility. Separate log sheets for different washing or sanitizing tanks may be useful as well. Don't be afraid to experiment to find out what works best for your operation.

Proper record keeping protocols:

- **Always fill in information in real time.** Never fill in information after the fact. When things are busy, it is always tempting to wait to record information after performing an inspection or a test. This is a good way to introduce errors into one's documentation and sends up a red flag to third-party auditors.
- **Never falsify information.** The temptation is obvious, but the fact is inspectors and auditors will almost certainly be much more concerned about falsified information or test results than about missing data.
- **If an error is made in entering information, do not erase or obscure it.** The proper protocol to correct a mistake is to put a single line through the erroneous entry, write in the correct information and initial the change. If for some reason the correction occurs some period of time after the information is originally entered, make a note of the time/date of the correction and the reason for the delayed correction on the page.

Remember: **Record it or regret it!**

Lynn Brandenberger

Horticulture Food Crops Extension and Research Specialist

***Acknowledgement:** These worksheets were adapted from documents originally developed by Robert B. Gravani, Ph.D., Elizabeth A. Bihn, M.S., and others at the Cornell University Department of Food Science.*

A Note on Calibration of Your Thermometer¹

(See worksheet on page 11)

Melting point of ice method (requires a thermometer that may be calibrated by adjusting a movable back plate on which temperature gradations appear):

1. Place ice in a container and let it melt.
2. Stir to make sure the temperature in the ice/water mixture is uniform throughout the container.
3. When the ice is partially melted and the container is filled with a 50/50 ice and water solution, insert the thermometer and wait until the needle indicator stabilizes. The thermometer should be 32°F (0°C).
4. If the thermometer is not reading 32°F (0°C), it should be adjusted by holding the head of the thermometer firmly and using a small wrench to turn the calibration (hex) nut under the head until the indicator reads 32° (0°C).

An important item to remember as you are calibrating your thermometer using the melting point of ice method is to never add water to ice to create an ice/water mixture because this mixture will not stabilize at 32°F (0°C) for some time, but will instead be at higher temperatures. The calibration will be much more accurate if you allow ice to melt to create an ice/water mixture.

¹This thermometer calibration information is taken from "Food Store Sanitation," 1998, Sixth Edition, Gravani, Robert B., Rishoi, Don C., Cornell University Food Industry Management Distance Education Program, Lebhar-Friedman Books, Chain Store Publishing Corp.

Worker Training Log

Name of operation: _____ Date: _____

Trainer: _____ Training Time: _____

Location: _____

Subject of training session: _____

Training method: Video Lecture Handout (Check all that apply)
(Please attach any written materials to this log with a staple):

Please see the food safety plan for overall Worker Training procedures.

Employee Name (please print)

Employee Signature

| | | |
|-----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |
| 5. | _____ | _____ |
| 6. | _____ | _____ |
| 7. | _____ | _____ |
| 8. | _____ | _____ |
| 9. | _____ | _____ |
| 10. | _____ | _____ |
| 11. | _____ | _____ |

Pest / Rodent Control Log

Name of operation:

Please see the food safety plan for overall Pest/Rodent control procedures.

| Company Used* or self | Date of Service or action taken | Type of Pest | Type of Control** | Location of Traps | Traps Checked (date) | Disposal means | Initials |
|-----------------------|---------------------------------|--------------|-------------------|-------------------|----------------------|----------------|----------|
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* If using a company for service, attach report or receipt of service for each of their visits.

** List type of control methods used such as exclusion, traps, poison, repellants, etc.

Reviewed by:

Title:

Date:

Animal Control Log

Name of operation:

Please see the food safety plan for overall animal/wildlife control procedures.

| Date | Company / Agency Used* or self | Animal Concern (species) | Type of Control** | Action Taken | Initials |
|------|--------------------------------|--------------------------|-------------------|--------------|----------|
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* If using a company for service, attach report or receipt of service for each of their visits.

** List type of control methods used such as exclusion, traps, poison, repellants, etc.

Reviewed by:

Title:

Date:

Cooler Temperature Log

Name of operation:

Cooler number:

Thermometer number:

Please see the food safety plan for overall temperature control procedures and thermometer calibration instructions

| Date | Thermometer calibrated date | Recorded temperature | | Corrective actions taken (if necessary): | Result of corrective actions and date accomplished | Initials |
|------|-----------------------------|----------------------|----|--|--|----------|
| | | AM | PM | | | |
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Reviewed by:

Title:

Date:

Truck Checklist

Name of operation:

Please see the food safety plan for overall truck checking procedures.

| Date | Trucking Company | Truck clean (Y / N) | If no, state the problem (off odor, debris, etc.) | Corrective Action | Truck temp at Loading | Temp data logger in load (Y / N) | Initials |
|------|------------------|---------------------|---|-------------------|-----------------------|-----------------------------------|----------|
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Reviewed By:

Title:

Date:

Illness/Injury Reporting log

Name of operation:

Please see the food safety plan for overall illness/injury reporting procedures.

| Date | Name of Employee | Injury sustained / illness reported | Action taken (ice applied, bandaged, sent to hospital, etc.) | Did employee return to work? (Y / N) | Initials |
|------|------------------|--|---|--|----------|
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Reviewed By:

Title:

Date:

First Aid Kit Monitoring log

Name of operation:

Please see the food safety plan for overall first aid kit monitoring.

| Date | Location of First Aid Kit or # | Checked & Stocked | If restocked, list added items here (band aids, ointment, etc) | Initials |
|------|--------------------------------|-------------------|--|----------|
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Reviewed By:

Title:

Date:

Fertilizer / Compost / Manure Applications log

Name of operation:

Please see the food safety plan for overall manure application procedures

| Date | Field Location | Material applied | Rate (ton/acre) | Composted? (Y / N) | Incorporated? (Y / N) | Supplier | Date Crop Planted | Date Crop Harvested | Initials |
|------|----------------|------------------|-----------------|--------------------|-----------------------|----------|-------------------|---------------------|----------|
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Reviewed By:

Title:

Date:

Produce Tracing Log

Name of operation:

Date:

Please see the food safety plan for overall traceback procedures.

| Harvest date | Crop | Field Location | Harvester Name / ID | Packing date | Packer Name / ID | Shipping date | Shipper | Customer | Initials |
|--------------|------|----------------|---------------------|--------------|------------------|---------------|---------|----------|----------|
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Reviewed by:

Title:

Date:

Recall / Traceback Log

Name of operation:

Date:

Conducted by:

Lot:

Product traced:

Please see the food safety plan for overall traceback procedures.

| Step backward | | | | | Step forward | | |
|---------------|-----------|--------------|--------|---------------|-----------------------|--|--|
| Harvest date | Harvester | Packing date | Packer | Shipping date | Customer(s) contacted | Amount of product remaining from original shipment at customer | Disposition of product which could not be recalled |
| | | | | | | | |

Reviewed by:

Title:

Date:

SI (METRIC) CONVERSION FACTORS

| <i>Approximate Conversions to SI Units</i> | | | | | <i>Approximate Conversions from SI Units</i> | | | | |
|--|----------------------------|-----------------|--------------------|-----------------|--|--------------------|-------------|----------------------------|---------------------|
| Symbol | When you know | Multiply by | To Find | Symbol | Symbol | When you know | Multiply by | To Find | Symbol |
| LENGTH | | | | | LENGTH | | | | |
| in | inches | 25.40 | millimeters | mm | mm | millimeters | 0.0394 | inches | in |
| ft | feet | 0.3048 | meters | m | m | meters | 3.281 | feet | ft |
| yd | yards | 0.9144 | meters | m | m | meters | 1.094 | yards | yds |
| mi | miles | 1.609 | kilometers | km | km | kilometers | 0.6214 | miles | mi |
| AREA | | | | | AREA | | | | |
| in ² | square inches | 645.2 | square millimeters | mm ² | mm ² | square millimeters | 0.00155 | square inches | in ² |
| ft ² | square feet | 0.0929 | square meters | m ² | m ² | square meters | 10.764 | square feet | ft ² |
| yd ² | square yards | 0.8361 | square meters | m ² | m ² | square meters | 1.196 | square yards | yd ² |
| ac | acres | 0.4047 | hectares | ha | ha | hectares | 2.471 | acres | ac |
| mi ² | square miles | 2.590 | square kilometers | km ² | km ² | square kilometers | 0.3861 | square miles | mi ² |
| VOLUME | | | | | VOLUME | | | | |
| fl oz | fluid ounces | 29.57 | milliliters | mL | mL | milliliters | 0.0338 | fluid ounces | fl oz |
| gal | gallon | 3.785 | liters | L | L | liters | 0.2642 | gallon | gal |
| ft ³ | cubic feet | 0.0283 | cubic meters | m ³ | m ³ | cubic meters | 35.315 | cubic feet | ft ³ |
| yd ³ | cubic yards | 0.7645 | cubic meters | m ³ | m ³ | cubic meters | 1.308 | cubic yards | yd ³ |
| MASS | | | | | MASS | | | | |
| oz | ounces | 28.35 | grams | g | g | grams | 0.0353 | ounces | oz |
| lb | pounds | 0.4536 | kilograms | kg | kg | kilograms | 2.205 | pounds | lb |
| T | short tons (2000 lb) | 0.907 | megagrams | Mg | Mg | megagrams | 1.1023 | short tons (2000 lb) | T |
| TEMPERATURE (exact) | | | | | TEMPERATURE (exact) | | | | |
| °F | degrees Fahrenheit | (°F-32) /1.8 | degrees Celsius | °C | °C | degrees Fahrenheit | 9/5(°C)+32 | degrees Celsius | °F |
| FORCE and PRESSURE or STRESS | | | | | FORCE and PRESSURE or STRESS | | | | |
| lbf | poundforce | 4.448 | Newtons | N | N | Newtons | 0.2248 | poundforce | lbf |
| lbf/in ² | poundforce per square inch | 6.895 | kilopascals | kPa | kPa | kilopascals | 0.1450 | poundforce per square inch | lbf/in ² |

This table was adapted from Knott's Handbook for Vegetable Growers, 4th Edition, John Wiley & Sons, New York, NY, 1997.

The Oklahoma Cooperative Extension Service Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; home economics; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of Cooperative Extension are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and based on factual information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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