I. Food Safety Plan
   A. A food safety plan is encouraged that outlines what steps the grower is taking to maintain and enhance on-farm safety of produce.

II. Water Sources for Irrigation and Drinkable Water (potable water)
   A. Wells are protected from outside contamination.
   B. Drinkable water supply and/or wells are tested at least once a year, before harvesting season using the standard water test.
   C. Water source(s) used for washing produce are located the distance required by local/state regulations from the manure storage facility, livestock area(s), pesticide storage area and septic system drainage field.
   D. Water used to clean and/or sanitize and for human consumption meets current EPA Drinking Water Standards.
   E. Records of all water tests are on file.
   F. Backflow devices and air gaps are installed at appropriate locations.
   G. Good management practices are in place to protect the quality of irrigation water.
   H. A risk assessment must be conducted regarding surface water used for irrigation.
      1. Farm livestock access to ponds and streams used for irrigation is limited.
      2. All reasonable efforts are made to exclude wildlife’s access to streams and ponds used for irrigation.

III. Good Manure/Bio-solids Management Practices
   A. Storage and treatment facilities located as far as practical and possible from growing and produce handling areas.
B. Storage and treatment facilities include physical barriers that prevent leakage, run-off or wind spread.

C. There is a manure treatment plan in place that meets USDA standards and includes the following:

1. Manure is incorporated into the soil immediately after application and date of application recorded.

2. Measures are in place to minimize recontamination of composted manure.

3. Fresh manure in any form is kept away from, edible plant parts during the growing season.

D. The use of fresh manure in any form during the growing season is in accordance with USDA and/or state regulations

E. Equipment that comes in contact with manure/bio-solids in any form is cleaned prior to and during harvest and/or transportation of fresh produce.

F. Bio-solids are applied in accordance with local regulations/processor instructions.

IV. In the Fields

A. Worker Health and Hygiene

1. Worker food safety training is in place.

2. Workers and supervisors practice good personal hygiene which includes:

   a. Wearing clean clothing, shoes and/or boots.  
   b. No smoking or eating or work area(s).
   c. Hair is covered at all times.
   d. Washing hands as required.
   e. Limiting bare hand contact with fresh produce.
   f. Covering open wound(s) with a clean bandage and wearing a single use plastic glove.

3. Field workers have easy access to toilet and hand washing Facilities.
4. Supervisors are aware of the symptoms of foodborne illnesses.

5. Sick employees and those with open wounds are reassigned to duties where there is no direct contact with produce.

B. Sanitary Facilities

1. Toilet facilities and hand washing stations are clean and regularly serviced (soap, water, single use paper towels).

2. Portable toilets are maintained and transported in a manner that prevents wastewater from contaminating fields.

C. Sanitation

1. Harvest storage containers are cleaned prior to use.

2. Clean containers are kept covered until used in the field.

3. Harvesting equipment is kept clean and in good working order.

4. Harvested produce never comes in contact with manure or bio-solids, non-potable water, workers with poor hygiene and/or dirty boots and clothing, dirty packaging or storage containers.

5. Farm livestock, including poultry and/or pets, are restricted from fields or orchards where crops are grown and harvested.

V. In the Packing/Processing Facility (check with the local regulatory authority to determine if the facility must be licensed and meet regulatory standards).

A. Worker Health and Hygiene

1. Worker food safety training in place.

2. Workers practice good personal hygiene
   a. Wearing clean clothing, shoes and boots
   b. No smoking or eating in work area(s)
   c. Hair is covered at all times
   d. Washing hands as required
   e. Limiting bare hand contact with fresh produce.
f. Covering open wound(s) with a clean bandage and wearing a single use plastic glove.
g. Sick employees and those with uncovered open wounds, sores, etc are assigned to other duties having no direct contact with fresh produce.

B. Sanitary Facilities

1. Restrooms are accessible and well serviced (cleaned regularly and well supplied with water, soap and paper towels)

C. Sanitation

1. Approved sanitizers used to sanitize food contact surfaces.
2. Processing area and equipment cleaned and sanitized at least once a day.
3. Unused and new packing containers protected from contamination.
4. Pest control system in place and documented
5. Produce waste is removed daily.

D. Temperature Control

1. Refrigeration storage units are maintained at the correct temperature and temperature logs are kept.
2. Refrigeration units not loaded beyond capacity.
3. Ice used for cooling is made of potable water.

E. Storage of Harvested Crops

1. Storage areas are clean and free of contamination
2. Storage areas are used exclusively for food crops and their containers.
3. Produce is stored at least six inches off the floor, depending on the type of produce
F. Washing Operations

1. Sanitizer leveled monitored.
2. Wash water changed when dirty or after several hours.
3. Wash water is at a temperature no more than 10 degrees cooler than the produce.
4. Packing lines, conveyer belts and all other food contact surfaces are washed, rinsed and sanitized at the end of the day.

VI. Transportation—Farm to Market

A. Workers loading and transporting produce practice good personal hygiene
B. Harvested produce loaded and stored in a manner to minimize physical damage and reduce the risk of contamination during transport and to allow for air circulation.
C. Vehicles used to transport fresh produce to market are clean and well maintained.
D. If refrigeration is required, the ambient temperature of the area where the produce is stored is at the proper temperature.
E. Vehicles used to transport produce are not used to transport animals or animal products.
F. Vehicles used to transport produce are not used to transport chemicals and fertilizer.

VII. Traceback Systems

A. A traceback plan should be in place so suspect product, for direct sale or wholesale, can be retrieved quickly.
B. Identifying the farm is the first step to traceback. Therefore, there must be permanent, visible signage identifying the farm address/site to the public.
C. Records are maintained for all produce sold wholesale from the farm and farm stand
VIII. Pick Your Own Operations-Field Sanitation (could also apply to those who give farm tours)

A. Pets and farm livestock, including poultry are not allowed in "pick your own" area(s)

B. Toilet facilities and handwashing stations are clean, regularly serviced and maintained in good working order (soap, water and single-use paper towels) and available for customer use.

C. Clean containers are available for customer purchase and use.

D. Produce picked by customers not accepted for sale.

E. Facilities are available for customers to clean hands after coming in contact with farm animals (petting zoo) prior to entering "pick your own" area.

IX. Retail Operations

A. The facility is clean and maintained in an orderly manner

B. The farm stand’s walls, ceilings and floors are maintained and free of cracks and crevices.

C. The ambient air temperature in the refrigeration units is monitored on a regular basis and temperature logs are maintained.

D. The area in and around the retail operation is free of debris and litter and well maintained.

E. Only food grade and/or easily cleanable containers are used to hold produce for sale.

F. The area around the retail operation is free of standing water

G. All outside garbage receptacles/dumpsters are kept covered/closed and located away from the retail operation entrances’ and the area(s) around them are free of debris.

H. Pets and other farm livestock, including poultry are not allowed in the retail operation.

I. The water in which certain produce may be displayed for sale is potable, clean and changed often.
J. Sliced melons wrapped and displayed on ice or in a refrigerated case.

K. There is a pest control program in place and is documented.

X. Food Defense

A. Growers and workers should be aware of FDA’s recommended Food Defense Programs.

References and Resources:


  Anusuya Rangarajan, Elizabeth A. Bihn, Robert B. Gravani, Donna L. Scott, and Marvin P. Pritts. Cornell University Good Agricultural Practices Program (607) 254-5383, eab@cornell.edu


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USEFUL WEBSITES

FDA Website
www.fda.gov

Penn State University
http://extension.psu.edu/food-safety/farm

Joint Institute of Food Safety and Applied Nutrition (JIFSAN)

Kentucky Department of Agriculture
http://www.kyagr.com/marketing/gapresources.htm

Cornell National GAP Program Education Materials
http://www.gaps.cornell.edu/

UC Davis GAP Information
http://ucfoodsafety.ucdavis.edu/UC_Publications/UC_Good_Agricultural_Practices_GAP/

Postharvest Technology Research and Information Center
http://postharvest.ucdavis.edu/

Postharvest Chlorination: Basic Properties and Key Points for Effective Disinfection
http://ucfoodsafety.ucdavis.edu/files/26414.pdf

University of Massachusetts

Produce Safety Alliance
http://producesafetyalliance.cornell.edu

United Fresh Produce Association
http://www.unitedfresh.org

Community Food Security Coalition (food safety and liability insurance for small scale and limited resource farmers)
www.foodsecurity.org/insurance.htm

On Farm Food Safety Project
www.onfarmfoodsafety.org

FamilyFarmed.org
www.familyfarmed.org/

FDA Food Defense Main Website
http://www.fda.gov/Food/FoodDefense/default.htm

USDA Audit Website