



National Food Safety Guidelines for Cantaloupe and Netted Melons

Appendix D: Harvesting Equipment
Cleaning and Sanitizing

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TABLE OF CONTENTS

ABBREVIATIONS AND DEFINITIONS 3

INTRODUCTION 4

Best Practices 5

Hygienic Design 5

Cleaning and Sanitizing Program 6

Routine Equipment Cleaning 6

Periodic Equipment Cleaning 8

Personnel 9

Verification Methods 10

RESOURCES 12

Appendix D.1: Cleaning and Sanitizing Hygienic Design Checklist 13

ABBREVIATIONS AND DEFINITIONS

Terminology	Definitions
Adjacent surfaces	Surfaces that are near food-contact surfaces but do not directly touch the food. The surfaces can still be a contamination source if human pathogens are transferred to the food or food-contact surfaces through drainage, drips, dirt or debris.
Aerobic plate count (APC)	A microbiological testing method is used to estimate the number of viable aerobic microorganisms (bacteria, yeasts, or molds) in a sample. This count is often used as an indicator of the overall microbial quality or hygienic status of food, water, or other products. Also known as total plate count (TPC).
Adenosine tri-phosphate (ATP)	A high-energy phosphate molecule that provides energy for cellular function.
ATP test methods	Exploit the relationship between ATP concentration and viable biomass or metabolic activity to estimate cleanliness.
Biofilms	The accumulation of microorganisms on a surface, which often happens in a hard-to-remove structure of bacterial origin.
Cleaning	Refers to the physical removal of visible and invisible soil and dirt from food-contact and non-food-contact surfaces.
Cross-contamination	The transfer of microorganisms, such as bacteria and viruses, from one place to another.
Food-contact surfaces	Those surfaces that contact food and those surfaces from which drainage, or other transfer, onto the food or onto surfaces that contact the food ordinarily during normal operations. "Food-contact surfaces" includes food-contact surfaces of equipment and tools used during harvest, packing and holding. Examples: Conveyor belts, cutting boards, knives, and baskets.
Harborage sites	An area on a piece of equipment that is difficult to clean and sanitize effectively. These are places where microbes have access to nutrients and water, making them ideal areas for bacteria to persist and grow.
Hard-to-reach areas	Parts of the harvesting equipment that are difficult to access for cleaning, sanitization, and inspection due to location, design, or obstruction of components. Ensuring that these areas are properly cleaned and sanitized is important to prevent contamination.
Human pathogen	A disease-causing organism such as a virus, parasite, or bacteria.

Terminology	Definitions
Monitoring	A planned sequence of observations or measurements to assess whether the sanitization program is being adequately implemented and it is used to produce an accurate record for future use in verification
Periodic equipment cleaning (PEC)	<p>Cleaning tasks for areas considered hard to reach, hard to see, touch, or sample, and therefore need disassembly to enable cleaning. PEC occurs fewer times than routine equipment cleaning, with occurrence intervals varying between weekly, quarterly or annually. Examples of these areas could include, but are not limited to the following:</p> <ul style="list-style-type: none"> • wear strips under belts • sandwich spots (adjoined laminated surfaces such as support strips, flaps to chlorine tunnels) • hidden surfaces such as cutting board attachments and framework • mechanical drive and support rollers • bearings
Personal protective equipment (PPE)	Specialized clothing, equipment, or accessories designed to protect individuals from hazards during cleaning and sanitization activities.
Routine equipment cleaning (REC)	Cleaning tasks that are performed daily using the 7 steps of cleaning and sanitization.
Sanitation	Maintenance or restoration of clean, hygienic conditions; it includes cleaning and sanitizing.
Sanitation standard operating procedure (SSOP)	A specific type of Standard Operating Procedure that focuses on the sanitation processes and practices required to ensure cleanliness, hygiene, and food safety of facilities and harvesting equipment.
Sanitize/sanitizing	Adequately treating any cleaned surface by a process that is effective in destroying vegetative cells of pathogens, and in substantially reducing numbers of other undesirable microorganisms, but without adversely affecting the product or its safety for the consumer. ¹
Standard operating procedure (SOP)	A detailed, written set of instructions designed to guide workers in performing specific tasks or processes consistently and safely. SOPs include steps and verification activities for the specified tasks.

¹ Definition from the Produce Safety Rule

INTRODUCTION

Equipment associated with production, harvesting, and field-packing, covered in section 6.8 of the National Food Safety Guidelines for Cantaloupe and Netted Melons (the Guidelines), includes guidance on: 1) equipment design, construction, use, and maintenance and 2) cleaning and sanitization programs. As foundational components of food safety programs for netted melon production, these programs are critical for reducing the risk of contamination from biological hazards during production and harvesting operations.

Best Practices

Cleaning Site Selection

- Conduct cleaning and sanitizing operations away from growing areas and unharvested product to avoid overspray, aerosol drift, or runoff onto crops.
- Designate specific field cleaning zones that are flat, well-drained, and located away from active production rows, irrigation sources, or drainage ditches.
- Avoid cleaning on slopes, near culverts, or in areas where water can flow toward growing fields.
- Prevent the release of cleaning and sanitizing solutions into surface water, irrigation canals, or drainage systems.
- Keep hoses, brushes, and containers elevated off the ground when not in use (e.g., on clean pallets or hanging racks).
- After use, clean, sanitize, and store cleaning tools in clean, dry containers to prevent re-contamination.
- Prevent vehicles or equipment used for cleaning from tracking soils or residues back into production blocks.

Hygienic Design

Sanitary or hygienic design refers to the engineering of harvesting equipment to ensure it can be thoroughly and appropriately cleaned and sanitized before entering the field. Hygienic design incorporates techniques that allow for efficient cleaning and inspection of harvesting equipment while minimizing the risk of contamination and ensuring the safety of harvested netted melons.

This type of design requires that materials used to construct contact- and non-food-contact surfaces on the harvesting equipment be durable, smooth, drainable, easy to clean, non-absorbent, non-toxic, and resistant to corrosion. The design and construction must minimize microbial ingress, survival, growth, and reproduction on both food-contact and non-food-contact surfaces. Hygienic design enhances the efficiency and cost effectiveness of sanitization programs by enabling cleaning and sanitizing tasks to be completed more quickly and thoroughly. Proper welding is also essential to prevent the buildup of soil and debris that may result in biofilm formation. Eliminating harborage sites by engineering and enabling fast, thorough cleaning reduces contamination risks.

Per section 6.8.1 *Equipment design, construction, use, and maintenance* in the Guidelines, a hygienic design review of harvesting equipment should consider, but is not limited to, the following features:

- **Surfaces & joints:** Continuous welds (no pits/crevices), radiused corners, minimal threads; eliminate dead ends and overlapping seams.
- **Drainability:** Pitch flat surfaces so water drains (no pooling); add drip-edges to prevent back-flow.

- **Accessibility:** Quick-release fasteners; tool-free disassembly where feasible; provide clean-out ports on tubes/guards.
- **Harborage prevention:** Seal tube ends; cap bolt threads; protect electrical boxes; avoid materials (e.g., foam or rubber) that absorb moisture.
- **Utilities:** Use cleanable hose reels, sanitary gaskets, food-grade (H1) lubricants; shield belts/gears from produce zones.

See Appendix D.1 at the end of this document for an example of a hygienic design checklist for harvesting equipment

Cleaning and Sanitizing Program

Proper cleaning and sanitizing of harvesting equipment are critical for maintaining food safety and preventing contamination during harvest. It is important that the company has a well-designed cleaning and sanitizing program for harvesting equipment, which provides a structured approach to cleaning and sanitizing.

The cleaning and sanitizing program includes:

- (i) SSOPs providing detailed instructions on how cleaning and sanitizing is to be performed.
- (ii) Routine equipment cleaning (REC) and periodic equipment cleaning (PEC) tasks.
- (iii) Who is responsible for executing these tasks.

This guide outlines best practices for implementing a cleaning and sanitizing program for harvesting equipment. Following these practices will aid in ensuring that all equipment is consistently cleaned and sanitized, which helps to prevent product contamination. The cleaning frequency should be based on the risk that the equipment or utensil poses as a contamination source (i.e., food-contact surfaces cleaned more frequently than non-food-contact surfaces that are not adjacent to food-contact surfaces).

Routine Equipment Cleaning

REC defines the minimum daily/shift cleaning and sanitizing requirements to keep harvesting equipment in a sanitary state during operations.

- Develop and follow a REC schedule for each piece of harvesting equipment. Document any modifications to the schedule.
- Cleaning frequencies for REC
 - Food-contact surfaces should be cleaned and sanitized daily, when moving between commodities and fields, or when excessive soil has built up.
 - Non-food-contact surfaces should be cleaned regularly to maintain sanitary conditions.
- REC activities include:
 - Develop and follow a cleaning schedule and SSOPs for each piece of harvesting equipment that follows section 6.8.2 in the guidelines and Table 1 below.
 - Document any modifications to the schedule.

Table 1. Seven steps for cleaning and sanitizing

Steps	Step Details
<p>Step 0: Preparation for sanitizing activities:</p>	<ul style="list-style-type: none"> • Have the harvest crew remove product, harvesting supplies, and waste from equipment and cleaning area. • Move the harvester to a location away from unharvested product to avoid cross-contamination from spray and run-off. Cleaning and sanitizing chemicals should not reach unharvested product. • Stay on walking surfaces. Never walk or step on food-contact surfaces. • Document and report abnormal conditions prior to cleaning and follow-up as necessary
<p>Step 1: Dry cleaning</p>	<ul style="list-style-type: none"> • Prepare equipment to facilitate accessibility to “hard-to-reach” areas. • Remove accumulated soils from food-contact and adjacent surfaces. • Wipe excess grease from motors and bearings. • Slowly run conveyers to aid in removal of accumulated soils as necessary.
<p>Step 2: Pre-rinse; remove all visible soils and debris</p>	<ul style="list-style-type: none"> • Rinse and pay attention to “hard-to-reach” areas. • Remove all visible soils and debris (top to bottom). • Rinse food-contact and adjacent surfaces. • Slowly run conveyers to aid in removal of debris during rinsing as necessary.
<p>Step 3: Detergent application, removal of remaining soils</p>	<ul style="list-style-type: none"> • Select a detergent that can be applied in field conditions to remove soil and debris. • Apply detergent solution to ensure coverage of food-contact and adjacent surfaces. • Do not allow detergent solutions to dry before scrubbing and rinsing. This may require washing of large pieces of equipment in sections.
<p>Step 4: Scrubbing</p>	<ul style="list-style-type: none"> • All areas should be scrubbed with hygienic color-coded brushes for food- and non-food-contact surfaces. • Scrub pads are designated for food- and non-food-contact surfaces and are for single-use only.
<p>Step 5: Rinse, removal of detergents and remaining soils</p>	<ul style="list-style-type: none"> • Rinse equipment top to bottom in the order detergents were applied, to ensure no chemical residues, soils, and debris are evident. • Be sure to rinse “hard-to-reach” areas. • Slowly run conveyers to aid the removal of soap and detergent. • Avoid spraying on the ground to avoid splashing and cross-contamination of clean equipment.

Steps	Step Details
<p style="text-align: center;">Step 6: Post-cleaning self-inspection and approval for sanitization</p>	<ul style="list-style-type: none"> • Prior to putting cleaning materials away, the operator or lead must self-inspect equipment to make sure it is visibly clean (e.g. removal of chemical residues, soils, and debris). • Remove any identified chemical residues, soils, and debris observed during the self-inspection and re-clean as necessary. • Release equipment for sanitizing when visual results and equipment conditions are acceptable. • Document: <ul style="list-style-type: none"> o Cleaning date and time, equipment identification and inspection results. o Any damage or items identified as needing further maintenance frayed belts, stable condition, hoses, corrosion, chipping paint, excessive lubricant). o Deficiencies and corrective actions including recleaning and follow-up inspection results.

Day of harvest activities:

Prior to beginning harvest, conduct a daily inspection that addresses cleaning and sanitization or a noticeable change in conditions since prior sanitization.

Based on the daily inspection, it may be necessary to re-clean or re-rinse and re-sanitize food-contact surfaces and adjacent surfaces on harvest equipment (i.e., accumulation of dirt, debris, dust, droppings, etc.).

Document any corrective actions taken, and if a piece of equipment represents a food safety risk, do not put it back in service.

Periodic Equipment Cleaning

PEC specifies risk-based deep-clean/tear-down activities to remove residues and potential contamination that routine cleaning might miss. PEC integrates preventive maintenance, targeted disassembly, and condition checks with frequencies adjusted by usage, environment, and verification trends to prevent disintegration of hygienic conditions over the season.

- **Cleaning frequencies for PEC**
 - o Certain pieces of harvesting equipment may need to be disassembled to perform in-depth cleaning and sanitization. Regularly evaluate soil and microbial loads in hard-to-reach or non-routinely cleaned locations (e.g., harborage sites, elevated or enclosed areas) on the equipment.
 - o Schedule PEC evaluations to ensure all equipment types and locations over time are covered.
 - o Include PEC in the cleaning and sanitizing program and establish frequencies based on the hygienic design review and PEC evaluations. Equipment with poor hygienic design should be prioritized for PEC. PEC evaluations may also need to be conducted more frequently based on risk (e.g., recent maintenance, high organic loading, or post-harvest environmental conditions).

- **PEC activities include:**

- o Before the PEC activities take place, the equipment should be cleaned and sanitized to remove all soils and organic material.
- o Preparation for disassembly: Set up clean plastic pallets to place the machinery components or parts on them, as well as containers with sanitary solutions to dip small parts.
- o Disassembly: Remove guards, belts, covers, manifolds, and accessible bearings to expose niche areas.
- o Pre-cleaning swabbing: Collect ATP/micro swabs of the hard-to-reach or non-routinely cleaned sites identified during the PEC evaluation.
- o Detail cleaning: Decalcify scale/mineral build-up; degrease drive components; clean under frames and inside tubing where accessible. Allow the equipment parts to air dry.
- o Condition inspection: Check weld integrity, seals, gaskets, belt edges, and fasteners; replace worn parts that create harborage.
- o Verification checks: Collect swabs of the same sites swabbed prior to cleaning (see verification methods section).
- o Sanitize the disassembled equipment (i.e., all of its parts).
- o Reassembly & lubrication: Reassemble the equipment using clean, sanitized tools. Re-grease with food-grade lubricants; remove any excess grease.
- o Inspection: Perform an inspection to ensure that the equipment was reassembled correctly.
- o Change control: Log changes to SOPs, chemicals, or frequency based on findings.

Personnel

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- **Assign responsibility to team members**

- o Cleaning and sanitizing crew: Designate responsible personnel for cleaning and sanitizing tasks, which may include company employees or external service providers.
- o Ensure that each team member knows which parts of the equipment they are accountable for and receive appropriate training on performing all cleaning and sanitizing activities described in SSOPs for REC and PEC, use of PPE, SDS for cleaning/sanitizing agents, verification methods, wastewater discharge, and recordkeeping.
- o Supervisor/lead/crew foreman: Designate personnel responsible for reviewing cleaning and sanitizing activities. This includes pre-operational inspections, as well as conducting reviews of cleaning and sanitizing activities.

- **Personal protective equipment (PPE)**

- o The use of PPE is essential in cleaning and sanitizing harvesting equipment to ensure the workers' safety and the effectiveness of the sanitization process. Using PPE, such as gloves, masks, goggles, and protective clothing, helps protect workers from exposure to hazards (e.g., chemicals, heat/cold, debris, sharp materials) that may be present during cleaning and sanitizing activities.

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 - Personnel conducting harvester cleaning and sanitizing should utilize PPE equipment (e.g., gloves, aprons, boots, face shields, respirators, etc.) based on the label requirements of the cleaning product(s) being used and in a manner that prevents cross-contamination of harvest equipment, tools, etc.
 - PPE should be handled and stored in a manner that prevents cross-contamination. Place PPE in a container (e.g., bag or box) and not on the ground or just thrown on the back of the truck.
 - Supervisors should ensure the crew wears the PPE according to the company's policies.

Verification Methods

Verification is essential to ensure that harvesting equipment cleaning and sanitizing procedures are followed correctly and effectively, helping to detect any residual contamination. Verification includes three types of activities. These verification activities can be used for different purposes as described in Table 1:

- **Visual inspection:** Check for visible cleanliness.
- **ATP readings:** Use ATP swabs to detect any remaining organic material. ATP testing involves swabbing a surface, mixing the sample with a reagent, and using a luminometer to measure light produced by the reaction. The results provide immediate feedback on surface cleanliness, allowing for quick corrective action if needed.
- **Microbial testing:** Assesses for the presence or quantification of microorganisms to confirm and verify cleaning and sanitizing activities. This involves collecting surface samples, typically through swabbing or contact plates, and analyzing them to detect and/or quantify microorganisms on equipment surfaces. It is important to note that the turn-around time to receive microbial test results from a laboratory are typically 24-48 hours.

Table 1. Examples of verification methods

Verification Type	Description	Comments
Visual inspections	<p>This is the process of visually checking the equipment to look for deficiencies in cleanliness.</p> <p>When conducting a visual inspection, be sure to look at the top side and underside of belts, rollers, between support structures, and any often-overlooked areas.</p> <p>Visual inspections should be done by trained individuals.</p>	<p>To be done after routine equipment cleaning (daily) and as part of the pre-operational inspection.</p>
ATP readings	<p>An ATP meter is used to quickly assess surface cleanliness by measuring ATP levels, which indicate biological contamination.</p> <p>After swabbing a surface, the sample is placed in the meter, which quantifies ATP through a luminescence reaction, with results displayed in relative light units (RLU). Higher RLU readings suggest higher contamination levels, allowing for immediate corrective action if cleanliness standards are not met.</p> <p>Limitations: Little correlation with microbial load or presence of human pathogens.</p>	<p>Entry point for monitoring; useful for swabbing on food-contact surfaces”; most effectively used to verify routine cleaning activities.</p> <p>Interpreting and accepting the results should be relative to historical data and observations as factors, such as the type of ATP unit, different surfaces, etc., might affect results.</p>
Microbial testing	<ul style="list-style-type: none"> • Indicator organisms:† • Directly verify the effectiveness of cleaning and sanitization • Serves as early warning of potential human pathogen presence • APCs, coliforms, generic <i>E. coli</i>, <i>Listeria</i> spp. • Human pathogens:† • Can be used to verify control measures • Useful in “seek and destroy” programs • <i>L. monocytogenes</i>, <i>Salmonella</i> <p>†Use of microbial testing is recommended for indicator organisms. If testing for pathogens, do it cautiously and with a predetermined plan of action if test results are positive.</p>	<p>Ideally, microbial testing would be done to verify the efficacy of the cleaning and sanitizing procedures.</p> <p>Useful to validate the efficacy of cleaning and sanitizing activities</p>

Resources

- CPS Tri-State Special Project on Harvest Equipment: A data-informed consensus of “clean for the intended purpose” – Research by: Dr. Channah Rock and Dr. Michelle Danyluk in collaboration with Dr. Trevor Suslow, Justin Kerr. [Final Report](#); [Webinar PPT](#)
- Leaman et al. 2024. Fresh produce harvesting equipment – A review of cleaning and sanitizing practices and related science. Food Prot. Trends. 43:126-143.
- Periodic Deep Cleaning Study of Harvesting Equipment: [Harvester - White Paper Periodic Deep Cleaning Study of Harvesting Equipment 2022.03.14.pdf](#)

Appendix D.1 - Cleaning and Sanitizing Hygienic Design Checklist

Section	Question / Description	Reasoning	Risk Level* (0-5)	Justification of Risk Level	Corrective Actions Needed	Timeline for Completion
Food-contact surfaces (FCS)						
	Are FCS accessible for cleaning and sanitizing?	Ensures sanitization crew can effectively and safely reach areas for cleaning to reduce contamination potential. Pay attention to transfer areas like guides or chutes.				
	Are FCS resistant to corrosion, non-toxic, and non-absorbent?	Ensures surfaces do not contribute to food contamination and are durable for long-term use with detergents and sanitizers.				
	Are they properly painted or coated?	The surfaces are properly painted or coated to prevent flaking or corrosion.				
	Are FCS and adjacent surfaces rust-free?	The FCS are in good condition so that the integrity of the metal or material is not compromised and can be effectively cleaned.				
	Standing water accumulates, drips, or drains onto FCS during operation	Surfaces should be sloped or diverted so that standing water does not present a potential contamination risk.				

Section	Question / Description	Reasoning	Risk Level* (0-5)	Justification of Risk Level	Corrective Actions Needed	Timeline for Completion
	Are food-contact equipment welds smooth, and free of pits, cracks, and corrosion? Are lap joints avoided?	Smooth welds prevent microbial harborage points and make cleaning more effective.				
	Are FCS free of threaded bolts, nuts, or other fasteners that could present foreign material or microbial harborage risks?	Reduces the risk of physical contamination and bacterial growth in hard-to-clean areas. Bolts that are adjusted frequently can harbor bacteria and reintroduce it when they are tightened or loosened.				

Accessibility and cleanability

	Belts can be adjusted or removed to allow cleaning of unexposed areas.	Facilitates the cleaning of belts and underneath components of hard-to-reach areas.				
	Unique features on the harvesting equipment could affect its cleanability or allow for bacterial ingress, survival, growth, and reproduction (e.g. cracks or holes in square tubing or welds, temporary welds, adjoined flat surfaces "sandwich joints").	Evaluate the unique features of the equipment to ensure that those design elements are cleanable.				

Section	Question / Description	Reasoning	Risk Level* (0-5)	Justification of Risk Level	Corrective Actions Needed	Timeline for Completion
Food-contact surfaces (FCS)						
	Do ladders and platforms provide full, safe access to all components and surfaces?	Ensures that all areas can be effectively cleaned and inspected as well as reducing cross-contamination risk from tools.				
	Can the equipment be dismantled and reassembled to allow for effective routine sanitization, maintenance, and inspection?	Allows for more frequent deep cleaning of components that might harbor contaminants.				
	Are detailed assembly and disassembly SSOP's available to facilitate routine and periodic cleaning and maintenance?	Ensures that staff can properly clean and maintain the equipment following SSOPs.				
Conveyor systems						
	Are conveyor systems (e.g. belts and tarps) ripped, torn or damaged?	Damaged belts can become a source of microbial contamination if exposed material cannot be effectively cleaned.				

Section	Question / Description	Reasoning	Risk Level* (0-5)	Justification of Risk Level	Corrective Actions Needed	Timeline for Completion
	Are single filament conveyor belts used instead of fibrous or lacing materials?	Single filament belts are less likely to have areas that can hold moisture and product debris; they also may be easier to clean while reducing total water, sanitizing chemicals, and time.				
	Can all belts be easily removed or the belts' tension slacked without tools to enable cleaning of surfaces underneath?	Facilitates cleaning of typically hard-to-reach areas that may drip, drain or draw onto FCS preventing contamination buildup.				
	Are carry and return rollers on conveyors solid or equipped with welded end caps rather than hollow tubes or press-fit components?	Prevents internal risk of water or product intrusion, leading to contamination, and eases cleaning efforts.				
Bearings and moving parts						
	Do hydraulic fluid, motors, trash or oil drip pans drain or are they drawn to FCS?	Chemical contamination can occur if pans overflow, leak or can drip onto FCS.				
	Are drives, chain guards, control boxes, or bearings located over open FCS?	Infrastructure that can collect oil or debris and can potentially contaminate surfaces if the covers or guards are removed				

Section	Question / Description	Reasoning	Risk Level* (0-5)	Justification of Risk Level	Corrective Actions Needed	Timeline for Completion
	Are bearings in areas other than food-contact areas? Are they sealed or capped, and mounted on stand-offs in product zones with corrosion-resistant materials?	Prevents lubricant leaks, damage to bearings leading to rust and material wear that can be a risk.				
	Are welds in non-food-contact zones smooth and free of corrosion?	Maintains the overall equipment integrity and hygiene.				
Lubrication & contamination control						
	Are there lubricants within or above food-contact areas?	Eliminates the risk of chemical contamination of food products.				
	Are drives or components mounted on cleanable supports and not located above FCS or zones without sufficient shielding?	Prevents potential contaminants from dripping onto FCS.				
	Is conduit, cabling, and process piping mounted via sanitary stand-offs, routed to avoid drip into food-contact areas, and free of zip ties with adequate stand-offs for cleaning?	Prevents contamination from utilities and facilitates cleaning.				

Section	Question / Description	Reasoning	Risk Level* (0-5)	Justification of Risk Level	Corrective Actions Needed	Timeline for Completion
	Are conduit and supply lines located away from, and not above, FCS or are zones separated to enable cleaning?	Reduces the risk of contaminants entering food zones and ensures ease of cleaning. Cables that are bundled or tied together can hold product and moisture leading to ability to harbor organisms.				
	Are piano hinges, knurling, braided covers, or socket head cap screws avoided in the equipment?	These components are difficult to clean and can harbor contaminants.				
Environmental controls						
	Are catch pans accessible or removable for cleaning and sloped away from FCS?	Ensures that any collected product waste does not contaminate food areas and can easily be disposed of.				
	Is the underside of equipment separated by at least 6 inches from the crop to prevent direct contact with food products?	Provides a physical space between product and soil to prevent contamination in harvest and sanitization where high pressure water can blast soil onto equipment.				

Section	Question / Description	Reasoning	Risk Level* (0-5)	Justification of Risk Level	Corrective Actions Needed	Timeline for Completion
	Are kick plates of sufficient height (>6") in place to prevent incidental contamination?	Prevents debris from foot traffic from reaching food contact areas.				
Maintenance & documentation						
	Is there a preventative maintenance program in place?	Is there a preventative maintenance program in place?				
Construction & design integrity						
	Are product zones free of joined surfaces (sandwich areas) that cannot be taken apart?	Allows for complete cleaning and prevents hidden contamination being trapped between two surfaces of similar or dissimilar material.				
	Are there no penetrations into hollow areas (product surfaces, zones or framework) that can entrap water and debris and area frame components free of skip or spot welds and laminations?	Eliminates potential harborage points for bacteria.				

*(5 = Critical Issues observed - 0 = Meets sanitary design)

Disclaimer: Users should customize this template to fit their operational needs as necessary. Advice offered with the Hygienic Design Review Template is based on the National Food Safety Guidelines for Cantaloupe and Netted Melons, section 6.6 of the Guidelines.

